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Meeting the needs

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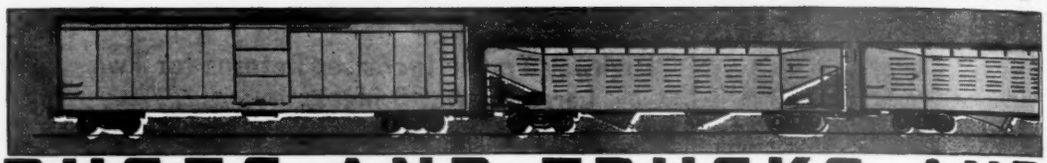

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RAILWAY AGE

Failure of New Deal Policies

Three recent developments, among others, have afforded additional conclusive evidence of the failure of the major New Deal policies. There has been difficulty in marketing long term government bonds, showing the decline of government credit due to excessive spending and increasing fear of inflation. The textile strike in the first industry for which a code was adopted shows failure of the NRA labor policy. For almost three months freight car loadings have been smaller than in 1933, and have declined from 32 per cent more to only 12 per cent more than in 1932, showing failure under the New Deal to maintain the increase of production and commerce which began two years ago.

Because of their similarity the textile strike recalls the railway shop employees strike of 1922. The Railroad Labor Board was a government body created by Congress and composed equally of representatives of the public, the employees and the railways. The shop crafts unions engaged in a nation-wide strike because of a reduction of wages awarded by the board after full hearings and arguments. The textile unions, as General Hugh S. Johnson has declared, called a strike because they refused to abide by provisions of a code to which they had agreed and which had reduced working hours and had increased average hourly wages 70 per cent.

These two strikes in the previous and present depressions illustrate why so many business men fear government efforts to settle labor disputes. The decisions of a government labor board can be made compulsory only as to employers. Labor leaders always increase their demands until even government boards must decide against them. For labor political reasons labor leaders cannot afford to accept adverse decisions. Therefore, labor disputes under governments which do not, like those of Russia, Germany and Italy, prohibit labor unions, must finally be submitted to the arbitrament of lockouts and strikes. The New Deal created expectations among labor leaders and wage earners that had to be disappointed. Consequently its policies that were to establish peace in industry have caused more bad feeling and warfare between employers and employees than ever existed before.

Why Production Has Declined

Very much the worst phase of the situation is the decline of production and commerce. This paper repeatedly for more than a year has shown that the objective of all government and business policies should be increase of production and commerce. Wealth and income are created solely by production. Efforts have been made to increase employment by reducing hours of work and to increase national purchasing power by advancing hourly wages. These efforts have disregarded facts and economic principles plain to every real economist. Wage earners being only part of the population, an advance in their wages causing increases in the costs and prices of what they produce must reduce the purchasing power of the much larger part of the population that buys their products, unless there is a corresponding increase in the income of the rest of the population. There cannot be a corresponding increase in the income of the rest of the population without an increase in total production, because only with what the rest of the population produces can it buy and pay for the products of wage earners. If the rest of the population cannot buy and pay for the products of wage earners, then permanent increased employment of wage earners cannot be provided.

This is what has occurred in the textile industry. The cost and prices of textiles were increased so much that buying of them declined, forcing a reduction of employment in the textile industry. And this is what has occurred virtually throughout industry. Increases in production costs and prices under NRA have curtailed buying, which has curtailed production and commerce, which has made business worse during the last three months than in 1933.

NRA—Plus Other Policies

Of course, NRA is not alone arresting the improvement in business. Huge and unwarranted government expenditures on public works and relief have diverted immense sums from productive to non-productive purposes and the government bonds issued to raise the money have absorbed capital which otherwise would have gone into private business and employment. While NRA has prevented reduced profits that otherwise might have been used to buy from the extremely depressed durable goods industries, the Securities Act has prevented the issuance of securities by which capital might have been raised for additional purchases of durable goods. Advances in wages and pension legislation applicable to the railroads have been added to NRA advances of prices to reduce railroad buying from the durable goods industries. The constant and in-

creasing threat of inflation has helped to destroy business confidence and initiative.

This paper predicted from its inception that the New Deal would hinder the natural improvement which began two years ago, but we believed the natural forces of recovery would prove stronger than the New Deal policies. The great drought and the New Deal combined have, however, recently proved too strong for these natural forces.

How to Revive Business Revival

There is a way to renew the revival of business. This is partially or wholly to over-throw the policies principally responsible for the cessation of recovery. Most labor leaders adhere to their economic theories which have been the principal foundation of the New Deal. Hours of work must be further reduced and hourly wages further advanced, they contend to increase employment and purchasing power. We anticipated that failure of their economic policies would be used by them as an argument for more intensive application of the same policies. Many business men have believed in economic policies as unsound as those of the labor leaders. They accepted NRA in the belief that by enabling them immediately to reduce competition and advance prices it would enable them to convert losses into profits on a small volume of business. It should be plain now to every business man that the principal trouble with business was inadequate volume of production and commerce, and that the only sane and practical means of reviving it were those which would increase the volume of production and commerce. Policies of reducing working hours and advancing wages and prices were the negation of those needed for this purpose. The time plainly has come for business itself to adopt sound policies and conduct not merely a battle, but a campaign for sound policies in government.

Railways in the Business Picture

The railways are seeking an advance in freight rates. Many business men are opposing it ostensibly upon the ground that it will hinder economic recovery, but actually because they do not want to be deprived of any of the benefits they think they are deriving or will derive from advances in their own prices. There are only two things that business, government and the railways can do to justify refusal by the Interstate Commerce Commission to advance rates. Industry can cancel its advances in prices to the railways, reduce its own costs correspondingly and support legislation which will destroy the unfair competitive advantages enjoyed by other carriers because of government subsidies and lack of regulation. Government can pass this needed legislation and allow the railways, in the absence of an increase in the volume of their business, to reduce wages after the advances agreed to have been completed on April 1, 1935. The nation cannot afford to have almost its entire railroad system bankrupted. Avoidance of this can be accomplished only by reducing its operating expenses, increasing its earnings, or both.

In the radio address made just before his vacation President Roosevelt asked the public to test the New Deal policies by answering the question, "Are you better off than you were a year ago?" The answer that would have to be made by a large majority of the American people now is in the negative. They cannot become better off again than a year ago until production and commerce become larger than a year ago. The reversal of the trend of production and commerce require a reversal of government and business policies responsible for the present trend.

Importance of Distant Signal

The failure of an engineman to take proper action at an approach signal, otherwise known as a distant signal, has in several instances been an important factor contributing to a serious accident. Certain phases of this situation should, therefore, be given thought in order that corrective measures may be devised.

In the early days of mechanical interlocking semaphore distant signals were wire-connected and all too frequently did not operate satisfactorily. This led certain roads to eliminate the wire connections and fix the blades in the caution position. On some roads these fixed distant signals are still in service in non-automatic block territory. Other roads are installing new automatic interlockings with fixed distant signals. Such a fixed distant signal is nothing more than a marker, because it gives the engineman no information as to whether the route is lined up and the home signal cleared. Not long ago an accident occurred at an interlocking in which the lack of an operative distant signal was, in the opinion of certain experts, the most important factor contributing to the accident. Therefore, it would seem that the additional cost of operative distant signals would be warranted.

However, the use of such signals does not solve the problem unless they are properly located and are observed by enginemen. The old rule with reference to the indication of caution signals, still in force on some roads, reads, "Prepare to stop at next signal." This leaves it to the engineman to use his judgment as to when he should start to reduce speed, and if he has not had occasion to stop in that location recently he may misjudge the conditions and overrun the home signal. A serious accident which occurred within recent years at an interlocking was caused primarily by such a combination of circumstances. One way to increase the safety of operation in such instances is to adopt revised rule 285 of the A. R. A. Standard Code which reads, "Prepare to stop at next signal. Train exceeding medium speed must at once reduce to that speed."

The next problem is to so locate the distant signal

that an engineman can reduce his train speed and stop short of the home signal. Adequate braking for long freight trains operated at speeds of today is difficult to determine in view of the varying conditions of rail, braking equipment and grades. However, it is recognized that from 7,500 to 10,000 ft. is required to stop a fast train of 100 loaded cars on even a slight descending grade. Under such circumstances, where the automatic block signals are spaced one mile apart, the caution indication displayed a mile from the home signal does not afford adequate braking distance. On the other hand, attempting to correct the situation by changing the controls to display the caution aspect at the two signals in approach introduces a hazardous trap, for when an engineman encounters too many caution signals he is apt to become confused and fail to reduce speed at the proper place. Furthermore, if he does reduce speed at the first of the two signals the two combined blocks are so long as to introduce considerable delay. A logical remedy for this situation is to provide four-aspect signals, including an approach-restricting aspect, which will assist in keeping trains moving at the highest speed consistent with safety. However, the provision of modern signaling will not solve the problem unless the enginemen are also given proper instructions with reference to signal indications, supplemented by adequate supervision to see that they control their trains in conformity with the rules.

What Caused the Rise In Railway Funded Debt?

The railways' difficulties, it would appear, are at last beginning to attract the serious attention of officers of the Administration, who are the only persons with the power necessary to deal with them. Heretofore, when interest in the railroads has manifested itself in official circles, ridiculous and unfounded statements have usually been made about the "burden" of railway funded debt, suggesting it as a cause, rather than an effect, of the railways' troubles. Those who have raised this question usually accuse railway managements of "overexpanding" railway plant and indebtedness in the years before the depression and urge the necessity for a general downward revision of bonded indebtedness.

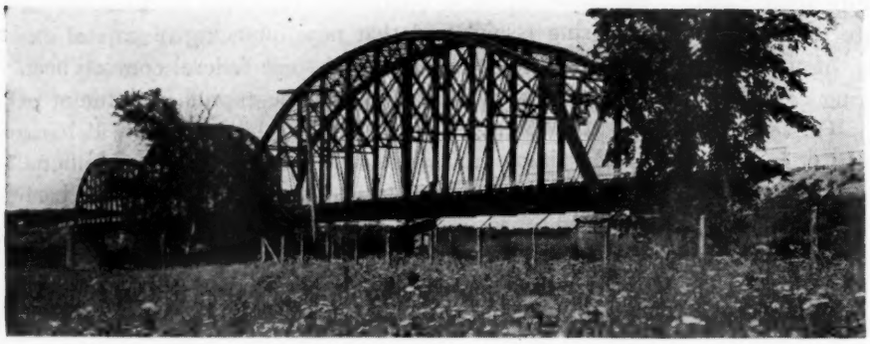
Actually, this contention is without any basis in fact, and advancing it serves no purpose save attracting attention from the railways' fundamental trouble, which is inequitable treatment at the hands of the government, the correction of which alone offers any real hope of lasting betterment in the railways' condition.

That the railways spent large sums for the improvement of their plant—8¼ billions from 1916 to 1932—prior to the depression is well-known. So also is the fact that, in normal times, railway financing has always occupied an important part of the private capital market. What, apparently, is not adequately realized is that most of these operations represent re-financing of maturing issues, and that new financing of capital expenditures has, in the period since federal control, been relatively very slight. While the capital investment of the railways was increasing 8¼ billions from 1916 to 1932, railway funded debt increased less than 2 billions. In other words, railway improvements have been financed in large measure out of earnings, or by the sale of stock, and, even though some of the additions and betterments may not be used to full capacity at the present time, their utilization is beyond question sufficient, and a great deal more than sufficient, to pay interest on that part of the additional investment which is represented by funded debt.

Indeed, the increase in funded debt itself—just as in the case of the other difficulties the railways face—is largely the responsibility, not of railway managements, but of the government. During federal control of the railways, the government invested 1,157 million dollars on capital account, for which the railroads were required to issue securities or otherwise reimburse the government upon the return to private operation. This was investment which railway managements did not order and over which they had no control. Moreover, the railways were in far from satisfactory condition when they were turned back to their owners at the end of federal control, and considerable capital expenditure was necessary to rehabilitate the plant. Such capital expenditures were not far short of 500 millions. Added to the 1,157 millions expended by the federal government on the railways which the railways had to finance or otherwise pay for, it is evident that not less than 1½ billion dollars, a sum equal to three-fourths of the net increase in funded debt which occurred on the railways from 1916 to 1932, was expended not by the direction or desire of railway managements, but by that of the federal government.

If to this 1½ billions be added the hundreds of millions of expenditures for grade crossing elimination and automatic train control ordered by governmental authority, it is evident that *the net increase in railway funded debt in the past 15 years can be more than accounted for by government action alone.* In the face of this fact, it ill becomes government officials to chide the railways with the magnitude of their funded debt. This difficulty which all but the weakest of the railways find in paying interest on this debt arises, not from mistakes which management has made, but from governmental interference which has made the debt as large as it is, and from the governments' refusal thus far to enable the railways to compete for traffic under equal terms with other agencies of transport.

To deal realistically and honestly with the relationship of the government to the railways is to attack the very heart of the cause of their troubles. To chide them about the magnitude of their funded debt and to attempt to scale it down, except in the case of weak properties which need to be "put through the wringer," is to waste time and energy in treating what is only a symptom of the patient's distress.



The Three-Span Bridge Over the South Channel, Now Paved for Highway Traffic

Highway Traffic Increases Returns For Two Large Railway Bridges

Simple alteration of New York Central structures over the St. Lawrence river make possible important motor route— Light rail movements a factor

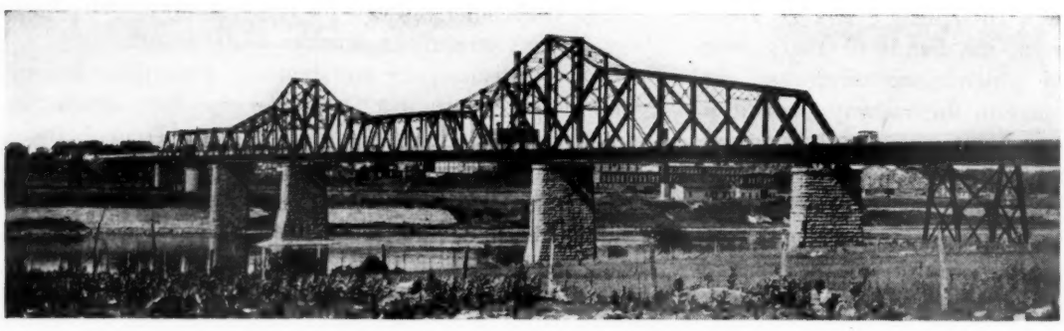
Looking North Over the Planked Deck of the South Channel Bridge, Showing How Comfortably It Is Used for Highway Traffic

TWO little-used but necessary railway bridges on the New York Central have recently been adapted also for highway traffic. These bridges, which are to operate as toll bridges for an estimated traffic of more than 100,000 vehicles annually, were made suitable for highway service by relatively simply alterations which in no way interfere with their use for the required rail traffic.

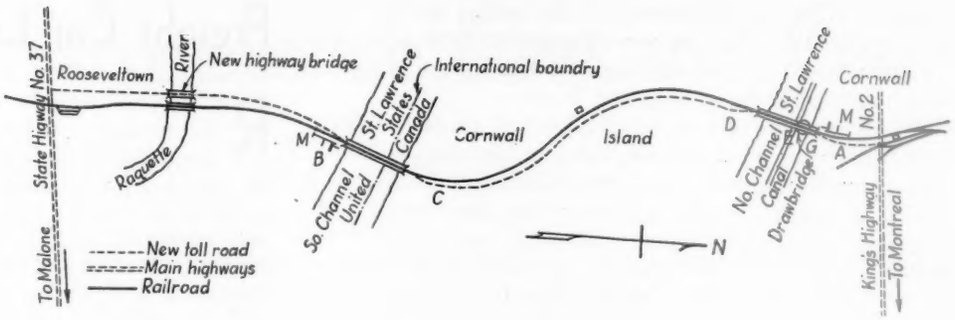
The two bridges referred to are on the single-track line of the New York Central between Tupper Lake, N. Y., and Ottawa, Ont., originally the New York & Ottawa and Ottawa & New York railroads, and carry the line over the two channels of the St. Lawrence river between Rooseveltown, N. Y., formerly Nyando, and Cornwall, Ont. These bridges, both single-track structures built in 1897, are located about 78 miles west of Montreal, Que., and about 300 miles east of Niagara Falls, N. Y., and are the only bridges crossing the international water boundary between these two cities.

For many years an additional international highway bridge has been desired between Montreal and Niagara Falls, but because of the expenditure necessary it never became a reality. With the decline of railway traffic on the bridges at Cornwall, a plan to adapt these bridges for vehicle traffic without interfering with their service to the railroad became feasible and was carried out.

The complete plan of the new highway crossing, from south to north, involved the construction of a section of roadway from State highway No. 37 at Rooseveltown, N. Y., to the Raquette river; the construction of a highway bridge over this river; the continuation of the new highway north, parallel with the railroad, approximately 3,300 ft. to the south channel of the St. Lawrence, where it is carried up to and across the first railroad bridge; and the further continuation of the highway across Cornwall island (an Indian reservation), parallel with the railroad for a distance of approximately 1½ miles, to the north channel of the river, where it is carried across the second railroad bridge. Beyond the latter bridge, the new highway swings off to the east and continues about 1,000 ft. to an intersection with King's highway No. 2,



The 841-Ft. Cantilever Structure Over the North Channel, Showing the Cornwall Canal Drawspan at the Far End



Sketch Plan Showing the Alinement of the New International Bridge Highway Route, Utilizing, With the Railroad, Two of the New York Central's Bridges

the main highway route between Montreal, Que., and Toronto, Ont.

The south channel bridge consists of three Pratt truss spans, each 368 ft. long, with a 60-ft. deck girder approach span at each end. The trusses of the main spans are spaced 22 ft. center to center. The bridge over the north channel includes a cantilever structure having a total length of 841 ft., and a swing draw span, 240 ft. long, one arm of which extends over the Cornwall canal, immediately north of the north channel. In addition, this bridge has a 190-ft., four-span deck girder viaduct approach at the south end and a 300-ft. nine-span deck girder viaduct approach at the north end. The cantilever structure, which has anchor arms 210 ft. 6 in. long and a center span of 420 ft., is 20 ft. wide, center to center of trusses, while the drawbridge span is 17 ft. wide between trusses. Both of the bridges had open decks, consisting of wooden ties resting directly on the stringers of the floor systems.

In adapting the bridges for vehicle traffic, the only changes made were in the deck structures. Here, every third bridge tie was replaced with a new long creosoted tie, extending out to the trusses, and then the entire deck, between and outside the track rails, was paved with 6-in. by 8-in. creosoted long-leaf yellow pine timbers, with the wider face up. The timbers were secured to the ties by 9-in. spikes, except immediately adjacent to the rails, where 10-in. lag screws were used to give greater assurance that they will not come loose.

Old 60-lb. rails were laid on their sides against the through rails to form flangeways, and 8-in. by 8-in. creosoted guard timbers, set on 4-in. by 8-in. blocks and bolted to the deck ties, were provided on each side of the roadway to keep vehicles a safe distance from the truss members or from accidently running off the deck. As a further safeguard for those crossing the bridges, pipe railings, 36 in. high and faced with 2-in. chain-link wire fencing, were provided along both sides of the bridges on top of the guard timbers. Both of the channel spans afford clear roadways 15 ft. 8 in. wide between guard timbers, while the drawbridge provides a clear roadway of 14 ft. 2 in.

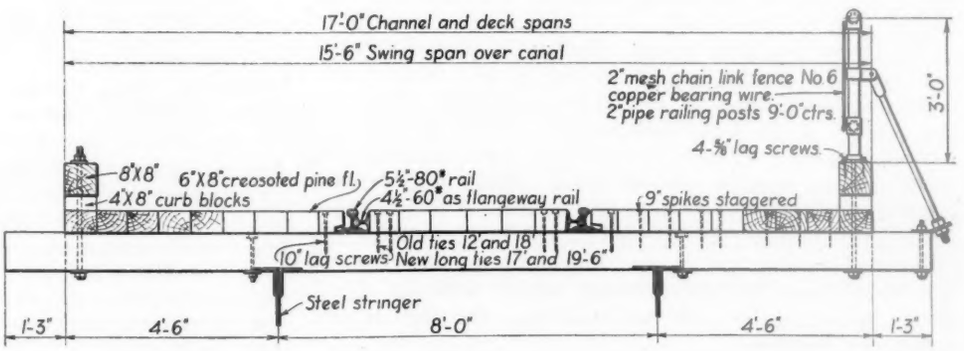
The new highway connecting the bridges is paved with asphalt, and is generally at a lower level than the tracks, which are on an embankment. At the ends of the bridges the roadway rises to the level of the track on easy grades, the sides of which are provided with cable guards.

Gates and Signals Control Traffic

To permit the combination of rail and highway traffic over the bridges, and to protect both classes of traffic at the drawspan opening, a co-ordinated system of highway gates and train signals was necessary. For some time the New York Central has operated only two

The Junction of the Railroad and the New Highway Bridge Route on the Cornwall Side of the River Crossing, Showing One of the Highway Gates and Train Signals

passenger trains each way and one freight train one way, daily except Sunday, over the bridges, and all of the movements have been between 8:20 a.m. and 6:50 p.m. Speeds have been restricted to 10 m.p.h., and all trains have been required to come to a stop before passing over the drawbridge. This situation was not changed with the opening of the bridges to highway traffic. During the navigation season it is necessary to open the drawbridge from 20 to 30 times daily to permit the passage of boats. Since this traffic is heavier than the rail traffic, the drawbridge has normally been kept open in recent years, and only closed to permit the passage of



Typical Cross Section of the New Timber Highway Deck Installed on the Railway Bridges

trains. With the utilization of the bridge by the highway traffic, this situation was changed and the draw now remains closed for rail and highway traffic, and is opened only to permit the passage of boats.

In the system of protection afforded, timber highway gates of truss construction, hinged on one end only and operated manually, were provided at points A, D, B and C, as shown on the accompanying alinement sketch, for closing off the highway where it enters upon the bridges. Each of the gates is operated by a gateman, all of whom are under the direction of the gateman at A, who is called the toll bridge director. A telephone system connects the various gate locations and the drawbridge operator's cabin, so that the different men can communicate with each other and receive instructions from the gateman at A as regards train movements and gate operations.

To govern train movements, mechanically-operated home signals are located at A and B. Each signal has two arms, the upper operating in two positions, while the lower is fixed to complete the aspect for an interlocked home signal. The bridge director at A is notified of the approach of trains from either the north or south by the railroad manual block operator at Cornwall. He then, in turn, notifies the other gatemen and the drawbridge operator. Upon the approach of a train, the gatemen at A, D, B and C stop traffic approaching on the highway, and, as soon as all cars are across the bridges, they close the gates.

To insure that all gates are closed before a train is permitted on the bridges, each gate is equipped with a circuit controller which is connected in a circuit including an indicator in the cabin of the director at A. When the indicator shows that all of the gates in the system are closed, the director at A clears the railroad signal at A for a southbound train, or directs the operator at B, by phone, to clear the railroad signal at that point for the movement of a northbound train. After a train has passed a gateman in either direction, he is permitted to open his gate unless he has instructions to the contrary.

When the drawbridge must be opened to permit the passage of boats, the bridge operator notifies the gateman at A. The train signals at A and B are checked to be in the stop position, and when all vehicle traffic has moved off the north channel bridge and the drawbridge, the highway gate at A is closed. Other gates immediately at the north and south ends of the drawbridge, designated G and E, respectively, are also closed by the drawbridge operator. Just before the operator opens the span, he operates a lever stand located at the north end of the bridge, which bolt-locks in the stop position the highway gate and the train signal at A. When the boat requiring the bridge opening has passed, the bridge operator closes the draw span, opens gates G and E, and notifies the gateman at A to open the gate at that point. Each opening of the bridge requires the closing of the highway from 7 to 10 min.

The new highway route, known as the Roosevelt International Bridge route, including the vehicle toll-collecting operations at the railroad bridges, is under the control of the Cornwall-Northern New York International Bridge Corporation, which was organized to construct and operate the new bridge route. The general contractor on the work was the Standard Engineering Company, Albany, N. Y. All of the bridge alterations were made under the supervision of the maintenance of way department of the railroad, which with its signal forces, also installed and will maintain the signals and indicators involved.

Freight Car Loading

WASHINGTON, D. C.

REVENUE freight car loading in the week ended September 8, which included the Labor Day holiday, totaled 562,730 cars, a decrease of 83,050 cars as compared with the week before and of 15,203 cars as compared with the corresponding week of last year. As compared with 1932 it was an increase of 61,193 cars. All classes of commodities showed decreases as compared with the preceding week but loading of grain and grain products and of live stock showed increases as compared with last year. The summary, as compiled by the Car Service Division of the American Railway Association, follows:

Revenue Freight Car Loading

Week Ended Saturday, September 8, 1934

District	1934	1933	1932
Eastern	113,922	124,890	105,317
Allegheny	100,218	117,654	89,924
Pocahontas	37,696	41,534	36,977
Southern	77,319	75,970	77,365
Northwestern	88,031	86,394	65,285
Central Western	93,236	86,332	82,166
Southwestern	52,308	45,159	44,503
Total Western Districts	233,575	217,885	191,954
Total All Roads	562,730	577,933	501,537
Commodities			
Grain and Grain Products	31,913	26,888	35,870
Live Stock	35,834	18,812	18,150
Coal	100,269	110,681	89,359
Coke	5,127	6,900	3,140
Forest Products	19,424	22,562	15,556
Ore	23,255	36,701	6,125
Merchandise L.C.L.	141,373	148,546	150,032
Miscellaneous	205,535	206,843	183,305
September 8	562,730	577,933	501,537
September 1	645,780	673,778	561,325
August 25	605,516	637,510	537,767
August 18	600,564	643,406	518,440
August 11	602,530	629,743	511,965
Cumulative Total, 36 Weeks	21,375,046	19,625,542	19,168,184

Car Loading in Canada

Car loadings in Canada for the week ending September 8 totaled 47,679 cars as against 52,888 cars for the preceding week, according to the Dominion Bureau of Statistics. The Labor Day holiday was responsible for some of this decrease but after adjustment the index number dropped from 81.51 to 75.77. Compared with the corresponding week of last year, total loadings increased by 6,652 cars.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
September 8, 1934	47,679	17,461
September 1, 1934	52,888	19,983
August 25, 1934	48,220	17,566
September 9, 1933	41,027	18,422
Cumulative Totals for Canada:		
September 8, 1934	1,543,375	790,244
September 9, 1933	1,305,172	654,378
September 10, 1932	1,467,623	686,465

THE NEW ZEALAND GOVERNMENT RAILWAYS, for the year ending March 31, 1934, reported a deficit after interest charges of £1,196,807, a decrease of £183,304 from the 1932-33 deficit of £1,380,111. Gross revenue last year totaled £6,332,711, an increase of 4.94 per cent as compared with 1932-33, and 1933-34 was the first year since 1929 in which gross revenue has exceeded that of a previous year. Meanwhile operating expenses increased only 1.22 per cent so that the 1933-34 net revenue was £1,085,558, an increase of £235,014 as compared with 1932-33. This improvement in net revenue was offset somewhat in the final result by a rise of £51,710 in interest charges, the latter being due principally to the taking over of a new line. The report points out that the net revenue has increased progressively over the past three years to an extent of £396,831 or 57.62 per cent.

The Safety Appliance Law and Car-Handling at Terminals*

A discussion of the requirements pertaining to the movements, inspection and repair of cars at large terminals

By W. J. Patterson

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THE original safety appliance act, passed in 1893, was amended by subsequent acts in 1896, 1903 and 1910, and in 1911 the Interstate Commerce Commission issued an order prescribing standards for certain safety appliances covered by the law. The purpose of this law is primarily to reduce the occupational hazards of train-service employees, including switchmen. The beneficial results which have been obtained from its enactment and administration are well illustrated by the chart which shows graphically the trends in coupling accidents to trainmen.

In 1893 there was one trainman killed in coupling accidents for each 580 employed, and one injured for each 21 employed. Had the same ratio prevailed in 1933, there would have been 350 killed in accidents of this character instead of only 12, and 9,673 injured instead of 246 as shown by the records. It is no exaggeration to say that hundreds of railroad employees were saved from fatal accidents and thousands have escaped injury as a result of improvement and standardization of safety appliance equipment brought about by the enactment and enforcement of the safety appliance law.

We are prone to think of a law as a restriction upon our actions or rights; however, so far as railroad employees are concerned the safety appliance law is not of that character. This law, and administrative requirements prescribed thereunder, provide for the establishment and maintenance of standards which afford minimum safety measures for its employees below which no railroad company is permitted to go. Railroads are permitted to exceed these minimum requirements and as a matter of fact many of them do provide standards materially greater than the minimum requirements of law.

It is important that railroad employees should not regard this law as placing unnecessary and burdensome restrictions upon them; on the contrary they should realize that the law confers real benefits upon them by reducing the hazards of employment, and that for their own benefit, and for the sake of their fellow-employees, their own actions, and their influence individually and collectively, should be directed toward securing strict observance of the law.

Transfer Trains and Yard Movements

Every railroad man is familiar in a general way with the requirements of law with respect to air brakes. The law as first enacted provided that there should be a sufficient number of air-brake cars in a train to enable the engineman to control its speed without requiring the use of hand brakes. This left the matter up to the judgment of the supervising officials, which might be good or bad, and which is at least fallible; and this provision of law was difficult if not impossible of enforcement.

Later the law was changed to require at least 50 per cent of the cars in a train to be equipped with air brakes, and the commission was given power to increase this percentage, which it did on two occasions, first to 75 per cent and the second time to 85 per cent, which is the law today. The law also requires all air-brake cars which are associated with the required minimum percentage also to have their brakes used and operated.

There has been a great deal of litigation as to the application of the air brake provisions of the law to certain movements. There never has been any question as to its application to road trains, but there has in times past been serious dispute as to its application to transfer trains. The air brake provision of the law applies to "any train," and the legal question to be determined in this connection is what constitutes a train. There are numerous court decisions on that point, and

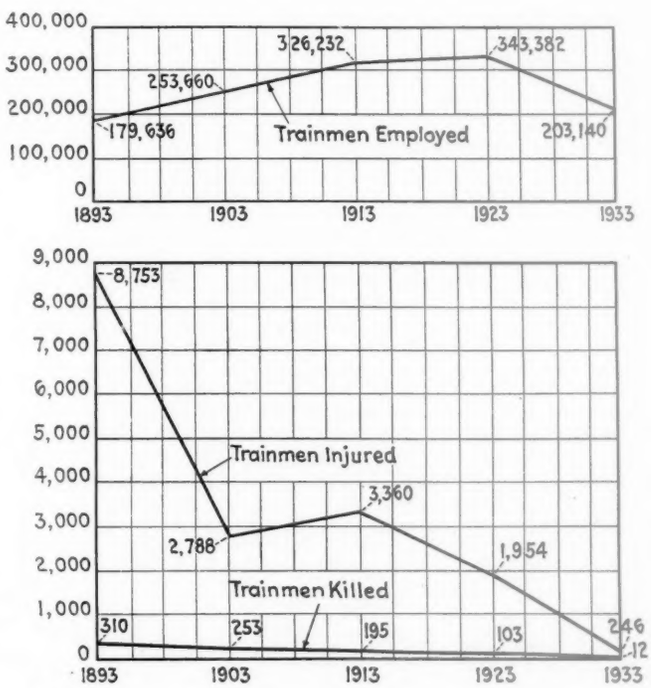


Chart Showing the Reduction in Coupling Accidents to Trainmen

*Abstract of an address before the Car Foremen's Association of Chicago, September 10, 1934.

in many instances the Supreme Court of the United States has ruled on the subject.

One of the earliest cases is that of *U. S. v. Erie Railroad,* decided by the Supreme Court in 1915; in this case a number of transfer trains were moved over main line track between Jersey City, Weehawken and Bergen, New Jersey, for distances of from 2 to 3½ miles without the air brakes being in use and operation. The first trial of the case resulted in judgment for the government which was reversed by the circuit court of appeals. On retrial judgment was for the defendant and the case was carried to the supreme court. In this case the supreme court drew a line of demarcation between a switching movement and a train movement in the following language:

> As the context shows, a train in the sense intended consists of engine and cars which have been assembled and coupled together for a run or trip along the road. When a train is thus made up and is proceeding on its journey it is within the operation of the air-brake provision. But it is otherwise with the various movements in railroad yards whereby cars are assembled and coupled into outgoing trains and whereby incoming trains which have completed their run are broken up. These are not train movements but mere switching operations, and so are not within the air-brake provisions.

In this case the supreme court held the transfers in question to be trains within the meaning of the air-brake provisions of the law.

At about the same time the supreme court also decided the Burlington case which involved movements of transfer trains between two freight yards at Kansas City, Mo., connected by tracks over which freight and passenger trains enter and leave the city. The two yards were about two miles apart. In holding that these were train movements the supreme court said:

> The work in which they were engaged was not shifting cars about in a yard or on isolated tracks devoted to switching operations, but moving traffic over a considerable stretch of main-line track—one that was a busy thoroughfare for interstate passenger and freight traffic. Every conditon suggested by the letter and spirit of the air-brake provision was present. And not only were these trains exposed to the hazards which that provision was intended to avoid or minimize, but unless their engineers were able readily and quickly to check or control their movements they were a serious menace to the safety of other trains which the statute was equally designed to protect.

In 1919 the supreme court was again called upon to pass upon this question in the Louisville & Jeffersonville Bridge case involving transfer movements to the Illinois Central at Louisville. The movements were for about three-quarters of a mile, a part of which was over main line track. In this connection it is interesting to know just what the Court said in holding these to be train movements:

> An engine and 26 cars assembled and coupled together, not only satisfies the dictionary definition of a "train of cars," but would certainly be so designated by men in general and in any fair acceptation of the term must be regarded as constituting a train within the meaning of the statute. It was a train greater in length than most regularly scheduled trains were when this Safety Appliance Act was passed 26 years ago, and even yet, probably, exceeds in length, passenger and freight trains considered, more than a majority of the regular road trains in this country.
>
> The work done with the cars, as described, was not a sorting, or selecting, or classifying of them, involving coupling and uncoupling, and the movement of one or a few at a time for short distances, but was a transfer of 26 cars as a unit from one terminal into that of another company for delivery, without uncoupling or switching out a single car, and it cannot, therefore, with propriety be called a switching movement.
>
> * * * * *
>
> This is not only a train movement, but it would be difficult to imagine one in which the control of the cars by train brakes would be more necessary, in order to secure that safety of employees, of passengers and of the public which it is the purpose of the act to secure, by requiring that engineers shall be given control sufficient to stop any train they may be moving promptly on the first signal or sight of danger.

The supreme court cases cited involved movements over main line track. In the Northern Pacific case decided by the supreme court in 1920 the carrier contended that the air-brake provisions of the law did not apply because the movements were not over main line track. The court disposed of that contention in the following language:

> But there is nothing in the Act which limits the application of the provision here in question to operations on main line tracks. The requirement that train brakes shall be coupled so as to be under engine control is in terms applicable to "all trains . . . used on any railroad engaged in interstate commerce. * * *
>
> * * * * *
>
> A moving locomotive with cars attached is without the provision of the Act only when it is *not* a train; as where the operation is that of switching, classifying and assembling cars within railroad yards for the purpose of making up trains.

In 1926 the circuit court of appeals for the eighth circuit in the Illinois Central case held that a movement of 18 cars over a lead track at Omaha, for a distance of 4,500 ft., within the same yard, was a train within the meaning of the act. The track over which the movement was made was never used for road trains, its use being confined to that of a switching lead.

In 1931 the circuit court of appeals for the ninth circuit held that the movement of five cars over side tracks and main line track a total distance of about two miles, during which four of the cars were set out and the remaining car hauled to destination, was a train movement.

In 1932 the same circuit court of appeals in the Southern Pacific case held that movements of cuts of from 8 to 26 cars over a switching lead, between two sections of the same yard at San Francisco, over which no road trains were operated, were train movements within the meaning of the law.

These are only a few of the many court decisions on the subject of transfer trains, but they are indicative of what the various courts have held on the subject. From this it will be noted that whenever transfer trains or drags of cars are operated as a unit for even relatively short distances from one definite point to another, irrespective of the kind of track, they are train movements within the meaning of this provision of the law, and the air brakes must be coupled up for operation. In each case at least 85 per cent of the cars must have their brakes used and operated by the engineman; and all power brake cars associated therewith must also have their brakes so used and operated. Under a decision of the supreme court, no power brake car associated with the required minimum of 85 per cent can have its power brakes cut out; such car can only be hauled to the rear of all cars having their brakes used and operated by the engineman.

Interchange of Cars with Defective Safety Appliances Prohibited

There is an absolute prohibition against the interchange of cars having defective safety appliances and carriers either delivering or receiving cars at interchange points without proper inspection do so at their peril. Both delivering and receiving carriers are equally liable. A carrier can move a defective car only for repair on its own line, and then only under certain conditions. A receiving road can not accept and move for repair a defective car, inasmuch as it did not become defective while in service on its line, and the movement of such

defective car by the delivering road is prohibited, as it is not moving such car for repair. It is not necessary that both delivering and receiving roads should be common carriers. A circuit court of appeals has held that a common carrier subject to the safety appliance acts could not lawfully receive a defective car from a lumber company—a purely private carrier.

In an address at Indianapolis recently I summarized the conditions under which a car having defective safety appliance equipment may be hauled without liability for the penalty prescribed by the law, as follows:

1. The privilege of hauling a defective car for repairs is only granted when the car had in the first instance been properly equipped and thereafter became defective while being used.

2. It may be hauled only by the carrier upon whose line the equipment became defective.

3. It may be hauled only from the place where the defective condition was first discovered to the nearest available point where the car can be repaired.

4. It may be hauled only if such movement is necessary to make the required repairs and if these repairs cannot be made except at such repair points.

5. The carrier assumes entire responsibility for risk of death or injury to railroad employees in connection with any such movement.

6. The movement of chained up cars in revenue trains is forbidden except when they contain live stock or perishable freight.

7. The proviso relates only to the movement of a car for repair after it has been discovered to be defective and does not relieve the carrier from liability for hauling a defective car before the defect has been discovered.

Therefore, it is imperative that all cars be inspected and necessary repairs made before they start on their journey to a connecting line.

Since transfer trains have been held not to be switching movements within the meaning of the law some misunderstanding has arisen as to whether or not locomotives used in switching service and so equipped under the commission's order can be used in transfer service. There is nothing in the order of the commission that prohibits such use; so-called "switching" locomotives can be lawfully used in any kind of switching or transfer service; but this is not true with respect to engines equipped for road service under the commission's order; they may be used for transfer work at terminals, but their use in switching service is prohibited.

In order to facilitate maintenance work and avoid any misunderstanding as to the proper classification many lines are now equipping their freight locomotives to conform to the classifications of both switching locomotives and road locomotives.

Inspection and Repair

Proper inspection and repair of safety appliances, which is always an important matter, is becoming of increasing importance at large terminals because of the practice of many carriers to reduce to a minimum the inspection en route of equipment in through trains. A car out of Chicago to either coast may not receive thorough inspection of its safety appliance equipment before it reaches its destination. If its safety appliances are in proper condition at time of departure the probabilities are that it will go through without difficulty; on the other hand, however, if some safety appliance defect has escaped the eye of the inspector, or proper attention of the repairman at Chicago, not only may one or more carriers incur the penalty prescribed by the law for hauling a car with defective safety appliances but trainmen and yardmen may be subjected to increased risk of accident en route. The law requires only that condition which is naturally desired both by employees and by carriers, namely, that the required safety appliances be maintained in proper condition, and inspection and repair forces, together with their supervisory officers, should have instilled into them a sense of responsibility to their fellow-employees to see to it that this essential and mandatory requirement is not neglected.

The requirements of the law are readily understood, and its beneficent purposes are generally recognized. Proper observance of the law in daily practice can best be secured through the intelligent cooperation of officials and employees who with their co-workers directly benefit therefrom. The Bureau of Safety, which is the federal agency of the administration of this law, should find it necessary to do little more than to check up from time to time the facilities and policing provided by the carriers, and the practices followed by the employees, to insure that the provisions of this law are being properly observed.

Official Salaries Reduced 34.6 Per Cent

WASHINGTON, D. C.

A REDUCTION of $31,717,403, or 34.6 per cent, in the aggregate salaries of railroad executives, officials, and staff assistants from 1929 to 1933 is shown in a report compiled by the Bureau of Statistics of the Interstate Commerce Commission made public on September 14 summarizing the returns by Class I roads in their annual reports relating to salaries. This includes the reductions in executive salaries above $60,000 a year made in response to Co-ordinator Eastman's request of July, 1933, estimated at $208,000 a year, which were in effect for only part of the year, and also the earlier reductions in some of the larger salaries required by the Reconstruction Finance Corporation. The bulk of the reduction was made in the number and amount of the salaries of the lower officials by action of the railroads themselves which applied generally. Many of the cuts in the lower salaries were doubtless made in proportion to those required in the higher salaries, which followed in many instances two or three cuts made by the managements.

The aggregate official compensation, the report shows, was $94,601,336 in 1929, paid to 16,694 persons, and $62,883,933 in 1933, paid to only 12,471 persons. This is a reduction of 26.82 per cent in the number of executives, officials, and staff assistants. Their average salary was $5,667 in 1929 and $5,042 in 1933, a decline of 10.7 per cent, which is less than the reduction in individual salaries, the report explains, because the average salary of the group would tend to increase with the discharge of relatively large numbers of officials in the lower salary groups.

Approximately half of the reduction in total compensation was effected among the executives, general officers, and staff assistants, classed as Division 1, of which the number was reduced from 7,497 in 1929 to 6,375 in 1933, and approximately half in that of the division officers, assistants, and staff assistants, classed as Division 2, whose number declined from 9,197 in 1929 to 6,096 in 1933. The average salary in the general division was reduced from $7,508 in 1929 to $6,372 in 1933 while that in the divisional class was reduced from $4,166 to $3,652. In the case of Division 1, however, the average salary in 1933 was only 84.9 per cent of that in 1929, while in Division 2 the 1933 average was 87.7 per cent of that in 1929.

In spite of the reductions the aggregate official com-

pensation was 4.41 per cent of the compensation of all employees in 1933, as compared with 3.26 per cent in 1929, and was 2.01 per cent of the railway operating revenues in 1933 as compared with 1.51 per cent in 1929. The ratio of aggregate salaries of officials and assistants to revenue reached a peak in 1932, when it was 2.24 per cent. For the first five months of 1934 it was 1.88 per cent.

The report consists mainly of a tabulation of the salaries and other compensation of those paid $10,000 or more during the year 1933 by individual railroads or systems. The names of individuals holding the positions listed are omitted in the report. Footnotes show all cases in which an official received $10,000 or more per annum even though his salary was split among various companies.

This compilation shows only 14 systems as paying to any of their executives the $60,000 a year maximum on which the railroads agreed last year with Mr. Eastman after he had originally suggested a maximum of $50,000. It shows 16 individuals as receiving the maximum and two or three others whose total compensation, split among several companies, is not stated. The systems paying the maximum of $60,000 are: Baltimore & Ohio, Daniel Willard, president; Chesapeake & Ohio-Nickel Plate-Pere Marquette, J. J. Bernet, president; Chicago, Burlington & Quincy, Ralph Budd, president; Delaware, Lackawanna & Western, J. M. Davis, president; Great Northern, W. P. Kenney, president; Illinois Central, L. A. Downs, president; Lehigh Valley, E. E. Loomis, president; Missouri-Kansas-Texas, M. H. Cahill, chairman and president in 1933; New York Central, F. E. Williamson, president; Norfolk & Western, A. C. Needles, president; Pennsylvania, W. W. Atterbury, president; Reading-Central of New Jersey, C. H. Ewing, president; Southern Pacific, Hale Holden, chairman; Union Pacific, W. A. Harriman, chairman, and C. R. Gray, president. Footnotes also indicate that L. F. Loree was paid $50,000 as president of the Delaware & Hudson and also $45,000 as chairman of the Kansas City Southern. The New York, New Haven & Hartford reported $37,000 as the amount assumed by the New Haven and the New York, Westchester & Boston of the salary of the president, J. J. Pelley, but stated that compensation was also paid to its officers by other subsidiary companies not reporting. The Louisville & Nashville reported the salary of its president, W. R. Cole, as $40,500 but stated that he also received other compensation from other system companies.

Six systems were listed as paying their chief executive officers $50,000 to $56,000. These are: Atchison, Topeka & Santa Fe, S. T. Bledsoe, president and chairman of executive committee, $54,000; Boston & Maine-Maine Central, E. S. French, president, $56,000; Chicago & North Western, F. W. Sargent, president, $50,000; Delaware & Hudson, L. F. Loree, president, $50,000; Erie, C. E. Denney, president, $50,000; Southern, Fairfax Harrison, president, $50,000. The Southern Pacific also reported $50,000 as the salary of the vice-chairman, Paul Shoup, and the president, A. D. McDonald. The only vice-president listed with a salary of over $45,000 was Herbert Fitzpatrick, vice-president and general counsel of the Chesapeake & Ohio, who also received salaries from the Missouri Pacific, Pere Marquette, and Missouri Pacific, making a total of $56,500.

The Pennsylvania system reported 90 salaries of $10,000 or more and the New York Central system reported 65.

As the main tabulation was concerned with salaries of $10,000 or more, the accompanying table was included in the report to show the number of all railway officials and their aggregate compensation on the basis of the regularly published wage statistics of Class I steam railways. In these statistics Division 1 includes executives, general officers, and assistants, and Division 2 includes division officers, assistants, and staff assistants.

Number and Aggregate Salaries of Executives, Officials and Staff Assistants Assigned to Division 1 and Division 2 in Interstate Commerce Commission Wage Statistics, 1929-1933*

Item and calendar year		Division 1	Division 2	Total
Number in division	1929	7,497	9,197	16,694
	1930	7,457	8,852	16,309
	1931	7,213	7,907	15,120
	1932	6,702	6,659	13,362
	1933	6,375	6,096	12,471
Aggregate compensation	1929	$56,288,755	$38,312,581	$94,601,336
	1930	56,800,520	37,169,225	93,969,745
	1931	54,052,387	32,972,737	87,025,124
	1932	45,096,253	25,066,861	70,163,114
	1933	40,619,682	22,264,251	62,883,933
Average salary	1929	$7,508	$4,166	$5,667
	1930	7,617	4,199	5,762
	1931	7,494	4,170	5,756
	1932	6,728	3,764	5,251
	1933	6,372	3,652	5,042
Ratio of average salary each year to 1929 average for the division (Percent)	1929	100.0	100.0	100.0
	1930	101.5	100.8	101.7
	1931	99.8	100.1	101.6
	1932	89.6	90.4	92.7
	1933	84.9	87.7	89.0
Percent aggregate compensation of the division is of compensation of all employees	1929	1.94	1.32	3.26
	1930	2.23	1.46	3.69
	1931	2.58	1.57	4.15
	1932	2.98	1.66	4.64
	1933	2.85	1.56	4.41
(1st 5 months of)	1934*	2.58	1.52	4.10
Percent aggregate compensation of the division is of railway operating revenues	1929	.90	.61	1.51
	1930	1.08	.70	1.78
	1931	1.29	.79	2.08
	1932	1.44	.80	2.24
	1933	1.30	.71	2.01
(1st 5 months of)	1934*	1.18	.70	1.88

* Excludes switching and terminal companies.

* * *

On the Loading Pier of the Standard Fruit & Steamship Company at La Ceiba, Honduras

A passenger train is shown on the left while at the right is a banana train placed alongside a fruit steamer and banana conveyors which may be seen in the background. The gage of this railroad is 3 ft. 6 in. and the locomotive shown is an 0-6-0 oil-burner.

$372,000,000 for Railway Supplies in Seven Months

Expenditures, excluding equipment, $145,000,000 over previous year—Inventories increase $15,000,000

WITH reports for the first six months of the year from railroads earning approximately 85 per cent of the operating revenues and with partial reports for July, purchases by the railroads of the United States for fuel and materials and supplies during the first seven months of 1934 are estimated to have reached the total of approximately $372,000,000, as compared with $227,600,000 during the first seven months of 1933 and $273,500,000 during the first seven months of 1932. These figures are exclusive of new locomotives and cars and also materials purchased by contractors of railway construction.

Seven months' purchases, 1934, include expenditures of approximately $127,578,000 for fuel, as compared with $94,750,000 in 1933 and $105,400,000 in 1932; $27,131,000 for ties as compared with $15,440,000 in 1933 and $21,550,000 in 1932; while expenditures for miscellaneous materials, including rail, amounted to approximately $217,291,000, as compared with $117,410,000 in 1933 and $146,550,000 in the first seven months of 1932.

Less Buying in July

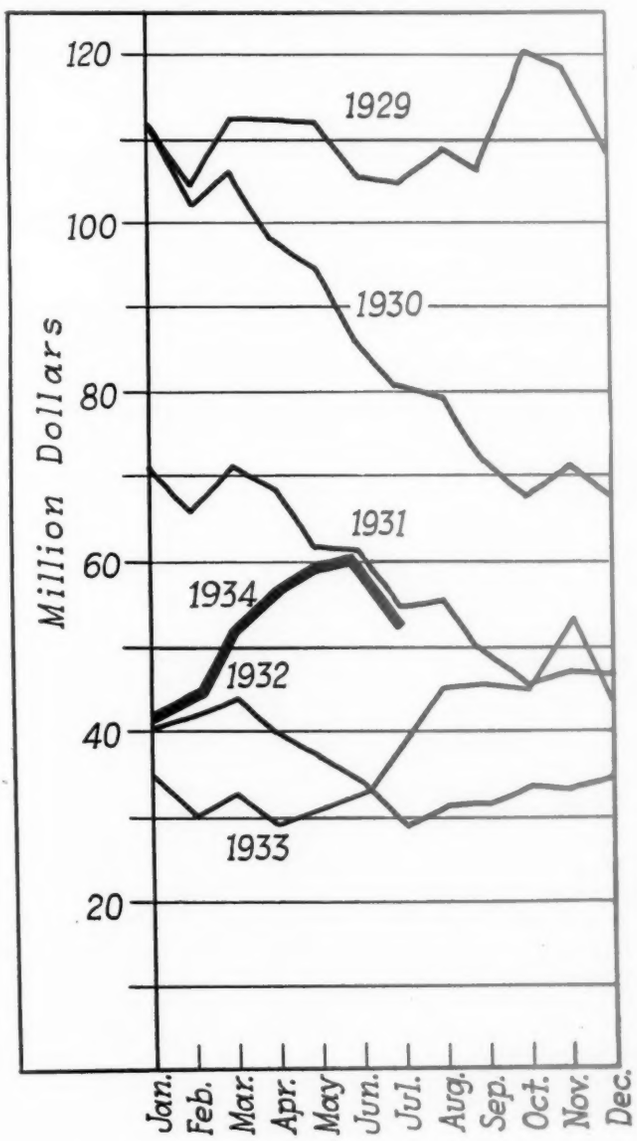
Total expenditures, exclusive of equipment, for June, amounting to approximately $61,000,000, were the highest in any month since June, 1931, and reflect increases in purchases since June, 1932. Expenditures in July, however, estimated at approximately $53,000,000, from information available at this time, were $8,000,000 below the previous month and show a sharp reduction in all classes of buying, with the exception of fuel. Expenditures for ties, amounting to approximately $3,700,000 in July, are compared with $4,000,000 in June, $4,700,000 in May and $5,500,000 in April, with storehouse materials and rail amounting to approximately $31,800,000 in July as compared with $40,100,000 in June and $36,400,000 in May. Expenditures for materials from manufacturers, including rail, were $35,500,000 in July, as compared with approximately $44,100,000 in April, $32,006,000 in March, $26,054,000 in February and $24,562,000 in January.

This reduction in railway purchases is responsive to the decreased activity on the railroads with the decline in earnings and was also to be expected from the fact that most of the orders for materials purchased with the first loans obtained from the Public Works' Administration have been placed and the materials received. Since railway purchases of materials are measured by the value of materials received, the decline in purchases shown for July was not as large as would be the case if the expenditures were measured by the value of orders placed, for the reason that retrenchment in railway buying really began on most roads in June. It is also true that the purchases made by the railroads during the first seven months of 1934, with the exception of rail, represented smaller amounts of material per dollar expended than in 1932 and 1933 because of the increase in prices under the N.R.A. code. These increases were pronounced in

Supplies in Stock*

	January 1, 1934	July 1, 1934
Fuel	$18,150,000	$20,400,000
Cross Ties	51,500,000	49,700,000
Rail, new and second-hand	34,000,000	41,130,000
Store Stock	180,500,000	183,050,000
Scrap	10,850,000	14,100,000
Total	$295,000,000	$308,380,000

* Subject to revision.



Trend of Purchases of Fuel, Materials and Supplies by Railroads

Railway Purchases*

	Fuel	Cross Ties	Other Material	Total	Total, Less Fuel
1932					
January	$17,500,000	$2,400,000	$21,600,000	$41,500,000	$24,000,000
February	17,900,000	2,400,000	23,100,000	43,400,000	25,500,000
March	18,300,000	3,900,000	23,300,000	45,500,000	27,200,000
April	15,000,000	4,000,000	21,800,000	40,800,000	25,800,000
May	14,000,000	3,200,000	21,300,000	38,500,000	24,500,000
June	11,950,000	3,300,000	20,150,000	35,400,000	23,450,000
July	10,750,000	2,350,000	15,300,000	28,400,000	17,650,000
Seven Months	$105,400,000	$21,550,000	$146,550,000	$273,500,000	$168,100,000
1933					
January	$15,300,000	$1,850,000	$16,150,000	$33,300,000	$18,000,000
February	14,000,000	2,000,000	14,100,000	30,100,000	16,100,000
March	13,900,000	2,250,000	15,750,000	31,900,000	18,000,000
April	12,000,000	2,160,000	14,840,000	29,000,000	17,000,000
May	12,750,000	2,120,000	16,430,000	31,300,000	18,550,000
June	12,300,000	2,360,000	18,340,000	33,000,000	20,700,000
July	15,500,000	2,700,000	21,800,000	39,000,000	24,500,000
Seven Months	$94,750,000	$15,440,000	$117,410,000	$227,600,000	$132,850,000
1934					
January	$17,263,000	$2,592,000	$21,970,000	$41,825,000	$24,562,000
February	18,406,000	3,245,000	22,809,000	44,460,000	26,054,000
March	20,209,000	3,394,000	28,612,000	52,215,000	32,006,000
April	17,900,000	5,500,000	35,600,000	59,000,000	41,100,000
May	19,400,000	4,700,000	36,400,000	60,500,000	41,100,000
June	16,900,000	4,000,000	40,100,000	61,000,000	44,100,000
July	17,500,000	3,700,000	31,800,000	53,000,000	35,500,000
Seven Months	$127,578,000	$27,131,000	$217,291,000	$372,000,000	$244,422,000

* Subject to revision.

buying lumber and fuel. The volume of purchases which the railroads have made so far this year, however, is much greater than in 1933 and reflects the consuming power of the railroads for materials and supplies when railway earnings are large enough to permit expenditures for the transportation requirements.

Larger Inventories

Based on book values, aggregate stocks of unapplied materials were larger each month this year than in the corresponding months of 1933 and have been increasing continuously, although gradually, since January. The aggregate for July 1 was $308,380,000, as compared with $305,423,000 on June 1, $304,907,000 on May 1, $295,000,000 on January 1, 1934, and $294,516,000 on July 1, 1933. The increase on July 1 over January 1 of this year, was approximately $15,000,000, or 5 per cent. This increase is the result of increases in material costs and also increased consumption of materials and to retrenchment in some lines of railway activity after the materials for the various projects had been purchased.

Based on the best records available at this time, sup-

Materials and Supplies in Stock—January and June, 1934

	Fuel		Cross Ties		Rail—New and S. H.		Other Material Ex. Scrap		Total Inc. Scrap	
	Jan.	June	Jan.	June	Jan.	June	Jan.	June	Jan.	June
A. T. & S. F. Lines	$ 153,990	$ 189,773	$ 436,119	$ 507,317	$ 383,471	$ 528,947	$2,939,052	$3,045,451	$3,912,632	$4,271,488
Baltimore & Ohio	262,940	335,679	2,033,436	1,808,350	1,178,971	1,188,352	5,163,404	5,563,296	8,638,751	8,895,677
Bangor & Aroostook	107,910	114,591	143,644	80,435	76,625	96,909	480,041	556,323	808,220	848,258
Boston & Albany	100,136	117,405	156,714	152,569	136,534	155,718	1,073,232	1,096,286	1,466,618	1,521,980
Boston & Maine	171,282	164,475	1,990,469	1,669,534	302,527	902,214	2,516,414	2,920,823	4,980,692	5,657,046
Central of Georgia	46,973	60,477	122,872	129,950	166,846	269,510	621,867	620,937	958,558	1,080,874
Central of New Jersey	143,879	124,977	258,375	262,814	223,011	205,268	1,286,821	1,047,322	1,912,086	1,640,381
Central Vermont	16,716	38,855	99,635	52,266	113,011	88,337	300,553	329,311	529,916	508,771
Chesapeake & Ohio	.....	.....	.....	.....	.....	.....	.....	.....	4,288,663	3,959,348
Chicago, Burl. & Quincy	273,728	309,871	2,153,084	1,701,302	799,698	1,198,897	3,918,461	4,586,790	7,765,075	8,297,114
Chicago & Eastern Ill.	17,962	16,221	116,740	200,465	31,160	40,628	397,534	526,022	586,438	793,019
Chicago & Illinois Mid.	1,374	1,203	3,792	8,898	71,578	32,585	247,257	237,453	315,784	280,139
Chicago & North West.	345,543	317,504	1,601,300	1,342,332	968,382	1,709,708	3,957,891	4,586,919	6,873,117	7,956,464
Chi., Mil., St. P. & P.	417,225	264,522	2,604,857	2,990,896	405,292	834,994	4,949,315	4,947,085	8,376,691	9,037,499
Chicago, R. I. & P. Lines	317,135	330,689	718,466	525,448	222,052	208,058	4,072,657	4,275,086	5,478,268	5,589,508
Chi., St. P., Minn. & O.	46,084	37,396	249,294	135,728	160,352	143,159	594,322	674,294	1,050,053	990,577
Clinchfield	3,519	.....	61,243	.....	22,789	.....	401,072	.....	488,623	.....
Columbus & Greenville	896	1,384	3,389	5,850	3,640	2,874	112,566	119,013	121,644	130,628
Delaware & Hudson	468,038	545,958	527,157	304,380	295,904	119,141	1,670,530	1,652,075	3,034,806	2,697,612
Duluth, Missabe & North.	155,507	104,264	354,482	273,455	98,886	86,025	379,424	463,325	988,299	927,069
Duluth, S. Shore & Atlantic	24,719	8,125	23,227	24,907	55,760	49,637	212,710	219,694	316,416	302,363
Elgin, Joliet & Eastern	31,050	28,110	82,824	49,034	90,184	80,229	871,782	849,881	1,119,831	1,011,999
Erie System	127,948	146,048	685,228	819,205	371,130	577,190	2,033,502	2,167,022	3,217,809	3,709,466
Florida East Coast	207,058	209,857	33,638	45,068	180,076	177,036	1,119,279	1,093,446	1,653,472	1,578,866
Illinois Central System	131,916	138,348	881,730	950,895	70,732	68,065	6,082,547	6,385,670	7,452,191	7,596,669
Kansas City Southern	283,204	.....	257,152	.....	63,295	.....	680,487	.....	1,284,138	.....
Lake Superior & Ishp.	49,478	25,663	9,182	13,684	28,040	19,598	121,464	119,910	212,878	183,082
Lehigh & New England	74,481	65,916	52,632	42,527	59,601	79,902	191,761	193,288	393,739	389,614
Louisiana & Arkansas	48,576	50,188	39,324	34,428	57,536	36,028	269,322	317,188	417,674	442,793
Louisville & Nashville	202,570	397,064	2,120,373	1,892,404	1,423,553	1,369,735	5,091,079	4,512,650	9,689,348	9,194,664
Maine Central	35,056	112,604	137,603	34,606	123,597	282,520	1,024,683	1,145,918	1,320,939	1,575,648
Minn., St. P. & S. S. Marie	142,408	222,966	409,332	272,305	183,671	183,297	1,244,541	1,301,587	1,979,952	1,980,155
Mobile & Ohio	20,173	33,574	21,163	24,548	32,056	51,032	574,159	550,552	687,319	709,122
New York Central Sys.	.....	.....	.....	.....	.....	.....	.....	.....	33,108,092	34,144,417
New York, Chic. & St. Louis	.....	.....	.....	.....	.....	.....	.....	.....	1,618,007	1,569,730
New York, New Haven & H.	440,057	425,830	657,020	513,139	454,741	645,037	4,293,019	4,302,315	5,844,838	5,886,323
Northwestern Pacific	26,880	26,117	27,717	29,373	71,602	50,931	157,980	138,493	284,179	244,914
Pere Marquette	.....	.....	.....	.....	.....	.....	.....	.....	1,186,590	1,301,428
Pittsburg & Shawmut	1,815	3,859	3,107	5,739	21,814	15,465	77,272	80,622	114,922	106,839
Pitts., Shawmut & North.	.....	2,295	3,329	16,121	7,838	13,226	82,719	82,220	100,204	118,674
Reading	163,855	201,589	825,719	666,151	707,438	412,122	3,539,610	3,535,802	5,236,622	4,815,664
Southern Pacific	1,340,827	1,282,960	1,357,438	1,424,934	1,628,290	1,920,633	5,016,324	5,488,921	9,342,879	10,117,448
Southern System	206,707	444,045	629,804	550,330	608,106	599,818	3,563,342	472,719	5,313,524	5,732,529
St. Louis-Southwest Lines	538,329	345,007	265,161	151,774	553,611	212,323	904,842	693,007	2,261,945	1,402,111
Tennessee Central	2,481	2,695	8,031	18,147	.....	.....	218,921	189,699	229,433	210,541
Texas & New Orleans	291,600	461,770	527,572	372,866	993,748	923,087	2,103,427	2,468,573	4,011,250	4,375,513
Texas & Pacific	719,478	695,945	111,871	118,453	66,527	72,593	1,887,156	1,821,896	2,785,033	2,708,889
Union Pacific	791,041	685,416	2,682,618	1,951,141	1,947,614	2,167,792	9,196,225	10,253,889	14,617,500	15,058,238
Western Pacific	78,148	62,952	88,878	101,198	403,366	397,686	1,175,349	1,288,691	1,781,415	1,897,027
Wheeling & Lake Erie	.....	18,161	.....	80,860	.....	212,402	.....	659,550	.....	970,973

plies on hand July 1 included fuel stocks of $20,400,000, as compared with $18,150,000 on January 1; cross tie stocks of $49,700,000, as compared with $51,500,000 on January 1; stocks of new and second-hand rail of $41,130,000, as compared with $34,000,000 on January 1; and storehouse stocks of $183,050,000, as compared with $180,500,000 on January 1. The book value of unsold scrap in the hands of railways on July 1 amounted to approximately $14,100,000, as compared with a book value of $12,900,000 on January 1. If the tonnage exceeds that on January 1, it reflects accumulations of obsolete material and the reluctance of many roads to sell scrap at present prices. Records of ties on hand confirm the reports of a considerably larger consumption of ties than during 1933, while the stocks of rail clearly show the fact that much of the rail purchased this year with loans from the Public Works' Administration has not yet been laid.

Railway Purchases—Fuel, Materials and Supplies—Six Months

	1933	1934
Akron, Canton & Youngstown	$163,052	$162,474
Alton	810,186	1,858,112
Ann Arbor	246,554	359,802
Atchison, Topeka & Santa Fe	8,456,051	11,578,885
Atlanta, Birmingham & Coast	249,290	395,272
Baltimore & Ohio	4,208,978	11,342,664
Bangor & Aroostook	583,982	790,554
Boston & Albany	1,617,831	2,196,718
Boston & Maine	2,563,496	6,146,424
Cambria & Indiana	58,796	69,588
Central of Georgia	949,239	1,656,312
Central of New Jersey	1,921,303	2,182,594
Central Vermont	545,243	664,080
Chesapeake & Ohio	4,250,203	5,903,902
Chicago & Eastern Illinois	671,463	1,289,693
Chicago & Illinois Midland	193,611	273,576
Chicago & North Western	5,433,663	8,964,766
Chicago, Burlington & Quincy	4,940,056	8,477,356
Chicago Great Western	1,363,311	1,529,289
Chicago, Indianapolis & Louis	380,726	545,002
Chicago, Mil., St. P. & Pac	5,489,661	7,639,261
Chicago, R. I. & Pac. Lines	3,786,555	6,080,157
Chicago, St. P., Minn. & O	1,374,139	1,674,117
Clinchfield	243,853	547,306
Columbus & Greenville	64,190	112,145
Delaware & Hudson	2,029,425	2,967,945
Detroit, Toledo & Ironton	158,931	427,325
Duluth, Missabe & Northern	193,508	714,178
Duluth, S. S. & Atlantic	138,660	216,488
Elgin, Joliet & Eastern	464,588	763,710
Erie System	4,401,608	6,953,259
Florida East Coast	504,243	715,253
Fort Smith & Western	46,259	70,927
Great Northern	3,395,960	7,076,317
Illinois Central System	5,907,128	8,430,030
Kansas City Southern	629,710	1,040,729
Lake Superior & Ishpeming	28,391	57,560
Lehigh & New England	174,902	383,591
Lehigh Valley	3,066,229	5,183,052
Louisiana & Arkansas	182,808	331,165
Louisville & Nashville	3,575,990	5,442,830
Maine Central	819,206	1,693,040
Minneapolis & St. Louis	455,405	752,487
Mississippi Central	.....	52,702
Minneapolis, St. P. & S. S. Marie	1,840,144	2,481,883
Missouri-Kansas-Texas Lines	1,294,336	2,654,857
Missouri Pacific Lines	5,092,232	10,382,407
Mobile & Ohio	548,738	849,079
Monongahela	50,679	184,272
Montour	99,624	235,832
Nashville, Chat. & St. L	1,208,788	1,405,438
Nevada Northern	33,659	31,827
New York Central Lines	18,101,306	31,867,316
New York, Chicago & St. Louis	1,664,452	2,704,106
New York, New Haven & Hartford	2,652,980	4,895,002
Northern Pacific	3,626,300	4,909,565
Northwestern Pacific	157,780	168,760
Pennsylvania and Long Island	18,604,350	29,502,324
Peoria & Pekin Union	150,493	241,859
Pere Marquette	1,783,791	2,417,465
Pittsburg & Shawmut	41,078	65,551
Pittsburgh & West Virginia	51,331	173,774
Pittsburg, Shawmut & North	62,751	141,376
Reading	2,635,496	4,083,998
Richmond, Fred. & Potomac	625,058	696,612
St. Louis-San Francisco Lines	3,706,503	5,638,678
St. Louis Southwestern	466,583	710,713
Southern System	4,513,233	8,931,497
Southern Pacific-Pacific Lines	5,079,512	10,972,056
Spokane, Portland & Seattle	.....	916,268
Tennessee Central	153,549	220,873
Southern Pacific-Tex. & La. Lines	1,296,622	2,782,199
Texas & Pacific	1,060,289	1,707,758
Union Pacific System	8,259,434	11,389,751
Utah	28,134	26,155
Wabash	2,018,180	3,888,341
Western Maryland	803,991	1,569,195
Western Pacific	875,340	1,190,000
Wheeling & Lake Erie	449,587	1,444,628
Delaware, Lack. & Western	3,034,983	4,074,461
Lehigh & Hudson River	100,741	133,651

Illinois to Install Crossing Protection at State Expense

A PROGRAM for improved protection of railroad-highway grade crossings is being undertaken in Illinois at the expense of the state, following the adoption of a report made by the Illinois Commerce Commission and a committee representing the commission and the railroads. Under the program, a federal-aid project approved by the governor, the state will install automatic flashing-light signals of the A.R.A. standard type at 297 locations, at a cost of $475,000, and reflector-type crossbuck signs and signs showing the number of tracks at 354 locations, at a cost of $25,000. As these devices are installed, employees rendering manual protection will be transferred to other crossings to give additional or new manual protection at other crossings and to avoid putting any railroad employees out of work by the program.

The entire initial cost, including labor, signals, controlling track circuits and other appurtenances, whether located upon the highway or upon the right of way of the railroad, will be paid out of public funds. The furnishing and installing of these signals and appurtenances will be let by contract, under competitive bids, by the state through its Department of Public Works and Buildings and the installation of the facilities will be under the supervision and subject to the approval of the railroad affected, as well as of the state. When it is advisable to have the track circuits and other work on the railroad right-of-way done by the technical organization of the railroad and where this course is deemed best, the railroad company will be regarded in effect, as a contractor or agency of the state for the doing of such work.

The cost of maintaining, operating and renewing these signals will be borne entirely by the railroads. Where, through highway changes, a signal must be replaced or moved, the expense incurred will be regarded as a part of the cost of the highway change and treated accordingly. Where a signal installation is no longer needed at a particular crossing, and the original installation was made at public expense, the signals become the property of the state and may be reinstalled by the state at any location it may select.

In arriving at this arrangement, it was found that the cost of automatic flashing-light signal installations varies rather widely, according to the physical conditions prevailing at the site. The average cost of each signal installation included in this program is $1,740. According to the committee, the average annual expense involved in maintaining, operating and renewing these signals, when capitalized, is somewhat in excess of that sum. The apportionment of the cost, therefore, has the effect of placing the greater ultimate burden of expense upon the railroads, even though the public bears the entire initial expense.

The program and the selection of locations is the result of a five months' study involving the co-operation of the engineering staffs of the Illinois Commerce Commission, the Department of Public Works and Buildings of Illinois and the railroads. A committee representing the railways and including C. F. Loweth, chief engineer of the Chicago, Milwaukee, St. Paul & Pacific; R. H. Ford, assistant chief engineer of the Chicago, Rock Island & Pacific; F. E. Morrow, chief engineer of the Chicago & Western Indiana; E. L. Crugar, chief engineer of the Wabash; and C. H. Burnet, chief engineer of the Cleveland, Cincinnati, Chicago & St. Louis; J. H. Mathews,

chief engineer, and Warren Henry, assistant chief engineer of the Illinois Commerce Commission; Ernst Lieberman, chief highway engineer, and Charles DeLeu, assistant chief engineer of the Department of Public Works and Buildings; and Dr. P. J. Raver, director of the Department of Rates and Research of the Illinois Commerce Commission and professor of economics of Northwestern university, comprised a joint committee which studied the technical phases of the work.

Number of Locations to be Protected

Road	Signals	Signs	Total
Alton	18	16	34
Alton & Eastern	..	1	1
Alton & Southern	1	..	1
Atchison, Topeka & Santa Fe	10	3	13
Baltimore & Ohio	12	12	24
Baltimore & Ohio Chicago Terminal	6	..	6
Belt Railway of Chicago	1	..	1
Chicago, Aurora & Elgin	1	..	1
Cleveland, Cincinnati, Chicago & St. Louis	18	13	31
Chicago, Burlington & Quincy	24	52	76
Chicago & Eastern Illinois	8	25	33
Chicago Great Western	9	3	12
Chicago & Illinois Midland	1	2	3
Chicago & North Western	15	14	29
Chicago, Milwaukee, St. Paul & Pacific	29	17	46
Chicago, Rock Island & Pacific	17	11	28
Chester & Mt. Vernon	..	2	2
Chicago, Springfield & St. Louis	..	6	6
Sahara Coal Co.	..	2	2
Harrisburg Coal Mining Co.	..	1	1
United Electric Coal Co.	..	1	1
Chicago, Terre Haute & Southeastern	..	1	1
East St. Louis, Columbia & Waterloo	1	1	2
Elgin, Joliet & Eastern	1	9	10
Grand Trunk Western	3	..	3
Illinois Central	32	69	101
Illinois Terminal Co.	11	6	17
Illinois Transfer	1	..	1
Indiana Harbor Belt	1	1	2
Litchfield & Madison	4	2	6
Louisville & Nashville	1	7	8
Michigan Central	1	1	2
Minneapolis & St. Louis	3	1	4
Minneapolis, St. Paul & Sault Ste. Marie	2	1	3
Missouri-Illinois	1	..	1
Missouri Pacific	4	11	15
Mobile & Ohio	2	1	3
New York, Chicago & St. Louis	6	5	11
Pennsylvania	1	8	9
Peoria & Eastern	6	..	6
Pittsburg, Cincinnati, Chicago & St. Louis	2	2	4
Rock Island Southern	2	1	3
Milwaukee, Rockford & Southwestern	..	2	2
Southern	8	5	13
St. Louis & O'Fallon	..	2	2
St. Louis & Ohio River	..	4	4
St. Louis, Troy & Eastern	..	1	1
Terminal Railroad Ass'n. of St. Louis	5	..	5
Toledo, Peoria & Western	7	12	19
Wabash	22	20	42
TOTAL	297	354	651

The crossings to be protected were selected from lists which were compiled and furnished by the district engineers in charge of the various highway districts into which the Illinois system of state highways is divided; from lists compiled and furnished by the engineering staff of each railroad; and from suggestions made by others. The number of crossings, arranged according to railroads, is shown in the accompanying table.

To evaluate definitely the hazard at crossings, a method and formula were worked out especialy for this project by the engineering staff of the Illinois Commerce Commission. The index of hazard, as determined by this formula, was regarded as a guide for judgment rather than as a limitation upon judgment and the final selections, while very generally in line with the results of the application of the formula, represent also a degree of independent judgment.

The method for determining hazard rests upon two general propositions: (1) That there are two principal elements in the hazard to the public at a grade crossing —that arising from the physical conditions, such as obstructions to view, steep grades, intersecting highways and sharp curves on the approach, and the volume of traffic, both on the highway and on the railroad that passes over the crossing; and (2) that the degree of hazard to each individual traveler for a given set of physical conditions increases substantially in proportion to the number of trains per day moving over the crossing, and that the danger to the general public increases in proportion to the number of highway travelers per day. Thus, the index of hazard with respect only to vehicular traffic is equal to the hazard arising out of physical conditions, multiplied by the number of trains multiplied by the number of highway vehicles.

In determining the formula, it was assumed that the hazard arising out of physical conditions at each crossing with respect to vehicles may be considered as the sum of four general elements which make for hazard. These are the inherent hazard (IH) always present at every crossing, the view factor (F1) or danger arising by reason of obstructions, the attention factor (F2) or the various physical conditions at crossings which may affect the attention of the driver, and the user factor (F3) which covers any particular manner of use of the crossing by either the railroad or the highway traveler which affects the hazard. The formula for vehicular traffic then is as follows:

Index of Hazard $= VT\ (IH + F1 + F2 + F3)$, where V is the volume of vehicular traffic and T the volume of train traffic.

In determining pedestrian hazard (F4), the conditions affecting pedestrians, such as the immediate proximity of a school or factory were considered. The formula for pedestrian traffic is as follows:

Index of Hazard $= PT\ (IH + F4)$, where P is an index representing the number of pedestrians.

In applying the formula, the factors were given weights as follows: Inherent hazard, 1; view factor, 4; attention factor, 4; and user factor, 1, while the number of vehicles and the number of trains were assigned factors according to their number. Thus, the maximum index that can be assigned to any crossing is:

Index of Hazard $= 10 \times 10\ (1 + 4 + 4 + 1)$ or 1,000.

In selecting the crossings to be protected, a survey was made and photographs were taken. Before the final selections were made, conferences were held between the engineers of the Illinois Commerce Commission who made the actual selections and the engineers of each railroad, as well as with the engineers representing the Department of Public Works and Buildings.

The selections, while not deliberately apportioned either among the railroads or among the counties, are well distributed over the state as a whole. Proposed flashing-light signal installations are located in 82 of the 101 counties of the state which have railroads within their boundaries and upon the lines of 50 different railroads. Reflector-type crossbuck signs are proposed to be installed in 95 of the 101 counties.

In selecting the crossings to be protected, a study of the situation indicated that if the list of crossings selected for protection be confined to those now wholly without protection, it would be necessary to omit many of the most dangerous crossings in favor of other crossings of comparatively small hazard. Many of the more dangerous crossings in the state have part-time manual protection and if any attempts were made immediately to require the railroad companies to provide full-time manual protection at all these crossings, a very considerable expense would be involved. Under the course of action taken, full-time protection, either automatic or manual, will be established at all of these more dangerous crossings, new or increased manual protection will be established at other crossings by men made available through the installation of automatic signals, and public money will be expended at the points where it will accomplish the best results in the way of protection to the traveling public.

Wheeler Asks Clarification of Railway Policy

IN a statement made public on September 20, Harry A. Wheeler, president of the Railway Business Association and chairman of the Transportation Conference of 1933-1934, urged Franklin D. Roosevelt, President of the United States and Joseph B. Eastman, Federal Co-ordinator of Transportation, to make some public statement respecting their proposed railroad policy and legislation which will be submitted to the next Congress. Mr. Wheeler asked pointedly whether Mr. Roosevelt favors government ownership of the railroads. He also called attention to the uncertainty which now exists and declared that continuation of this uncertainty is having a bad effect on the credit of the railroads because of the lack of confidence on the part of investors, and contended that a full disclosure of administrative plans would accomplish much in the restoration of confidence in so far as the railroad structure is concerned. Mr. Wheeler's statement is as follows:

"News dispatches from the summer White House at Hyde Park, from New York, and from Washington indicate quite definitely that the administration is planning important new steps respecting the country's railroads. These reports are entitled to thoughtful public consideration inasmuch as they are connected directly with the conference which the President has had with Mr. Eastman, and with others, familiar with the railroad situation. It is to be assumed that the program has begun to take shape for presentation as a legislative enactment and it may well be that the history-making meetings of the railroads called in Chicago for September 20 and 21 will add greatly to the public interest in this subject.

"Mr. Eastman's statement to newspaper correspondents at Hyde Park was to the effect that the program dealing with systems of transportation would be comprehensive in character. Those who are interested directly in the railroads and those who desire to see efficient transportation encouraged and maintained, are of the opinion that the time has arrived to be taken into the confidence of the administration regarding the plans.

Administration Urged to Consider Federal Ownership

"There is a growing belief, and not without some justification, that the administration is being urged to give serious thought to a program of federal ownership of the railroads. Mr. Eastman has most frankly advocated such ownership in principle but Editor Raymond Moley in the August 25 issue of TODAY asserts that such a program would not be 'in line with the policies announced by President Roosevelt in the 1932 campaign.' Does the President still hold the same views? Because of the uncertainty that tends to undermine confidence, I am earnestly appealing to the President that he or some of his authorized spokesmen make a public statement as to the course they intend to pursue.

"Either the administration hopes to introduce a policy of government ownership of railroads or it doesn't. Its declaration either way would simplify the whole situation. If the decision looks toward this experiment, present owners could move to protect their interests and the necessity for a complicated program of further regulation could be abandoned.

"If the declaration favors a continuance of private ownership railroad credit would at once be strengthened by the removal of present uncertainty and by the reasonable assurance that federal action will adjust and equalize the competitive conditions between the several types of transportation services.

"That there is a serious transportation problem in this country there can be no doubt. About one-sixth of the total operated rail mileage of the country is in receivership. Some other roads also face financial difficulties. The government lately has added new burdens in the shape of the Railway Pension Act. This with the restoration of the predepression wage scale has created a condition which few roads can meet.

"It is apparent, therefore, that the railroad problem demands early and comprehensive consideration. But that is not to say that the railroads cannot become prosperous again under private ownership. To do this, however, they must have a square deal and they should not be subject to further oppressive legislation.

Receiverships a Depressing Influence

"In the matter of receiverships, it is to be admitted frankly that reorganizations are vital. Further tardy action by the private owners in effecting necessary reorganizations may cause the government to take more drastic action than is desirable, more drastic even than some of our theorists now plan. The President has manifested some impatience over the slow procedure in reorganization and he has disclosed his thoughts that other railroads not in receiverships must reorganize financially to place their existing capital structure in line to be supported by future earnings. Saturday's press carried Washington's admission that the amendments to the bankruptcy laws permitting voluntary railroad reorganization had completely failed and that administration experts were busily engaged on further amendments that may include compulsion. It behooves the railroads, bondholders and shareholders, therefore, to do their part and to act immediately. Otherwise they must be prepared to receive drastic proposals from Washington or even to face a situation where the administration may find itself called upon to take over the properties notwithstanding the assumed preference of the President to leave the operations in private hands.

"Meanwhile, the admitted facts of the situation should be boldly faced. Any substantial percentage of railway mileage in receivership, or facing that possibility, constitutes a depressing influence that vitally affects the sources of credit to which the railroads have access. The lack of confidence accruing therefrom cannot exist long without producing more receiverships, and it is not without its influence in all other forms of financing.

"There exists a belief that the government has by various subsidy policies and by failure to provide any regulation of their interstate operations, given much assistance to all competitors of the rail lines while maintaining a state of rigid regulation that bears heavily upon the railroads. The investor in railroads, therefore, is inclined to feel that the government fosters unfair competition in transportation and discriminates against his investments in rail transportation to his prejudice and to the preference of other forms of transportation.

Funds Curtailed

"While there may be differences of opinion as to the weight of these factors in their effect upon sources of capital supply for the railroads, it certainly can be said without fear of contradiction that the present trend of events further curtails the source of funds available to the railroads. Investors will not release their funds when they are not advised as to the future plans and

when control of those plans lies in the hands of the government, investors naturally are the more shy.

"So, all things considered, I repeat, the administration ought to let the country know what it proposes to do. Much harm can come from continued secrecy concerning new deal plans for the railroads. Managements of the properties obviously are unwilling to accept the responsibility for risks which would be normal in prosperous times but which are exceedingly hazardous when future policies are secret. The government has been urging that we all have confidence. That is a proper request when we are advised as to the character of things in which we are asked to repose our faith. We cannot go far until we know what the factors are. Managements of corporations, railroad or otherwise, after all, are only trustees of the funds advanced by bondholders and shareholders."

Fuel Association and General Foremen Meet in Chicago

IN the first annual meeting of the International Railway Fuel Association since May, 1930, over 180 members and guests gathered for a two-day session at the Hotel Sherman, Chicago, September 17 and 18. While the program was shorter than usual and there was no accompanying exhibition of railway equipment and supplies, the meeting was a pronounced success from the point of view of general importance of the subjects discussed and the keen interest in these subjects as evidenced by the extensive discussion. An unusually important action was taken at the close of the meeting, when seven specific items bearing on the attainment of maximum fuel returns per dollar expended were suggested for the development of recommended practices by the American Railway Association, Mechanical Division. The present officers of the association were re-elected and will hold office until the next annual meeting, which it is planned to have in May, 1935.

Addresses at Fuel Association Meeting

The meeting was presided over by President J. M. Nicholson, master mechanic, Atchison, Topeka & Santa Fe, Argentine, Kans., the general program having been developed by Secretary-Treasurer T. Duff Smith. Following an opening address by President Nicholson, R. L. Lockwood, director, Section of Purchases, Federal Co-ordinator of Transportation, made an address in which he paid tribute to the constructive character of the association's activities in the past and expressed his desire to help co-ordinate the activities of the railroads in securing improved fuel purchasing methods.

Carroll B. Huntress, president Appalachian Coals, who addressed the association as a representative of the coal industry, said that the railroads should co-operate more fully with the producers, as, for example, in the use of screenings on stoker-fired locomotives, and other sizes of coal not in urgent commercial demand.

Lawrence Richardson, mechanical assistant, Boston & Maine, discussed the subject of locomotive performance, stating that it is not possible to reproduce in actual practice results obtained when using a dynamometer car, unless engine crews are given the necessary indicating and recording equipment to show them when the most efficient operation is being secured.

Committee reports were presented on the following subjects: Fuel Distribution and Statistics; Storage, Oil and Coal; Front Ends, Grates and Ash Pans; Locomotive Firing Practice, Oil and Coal; Fuel Stations; New Locomotive Economy Devices; Stationary Boilers; Steam Turbine and Steam Condensing Locomotives; and Inspection and Preparation of Coal.

General Foremen Also Hold Meeting

The International Railway General Foremen's Association also held a meeting, after a lapse of four years, with President A. H. Keys, district master car builder, Baltimore & Ohio, presiding, and Secretary-Treasurer William Hall in charge of the general arrangements. The principal address was made by C. M. Darden, superintendent machinery, Nashville, Chattanooga & St. Louis, who stressed the importance of railway shop supervisors in maintaining equipment in proper condition to sustain modern, high, operating speeds and severe service conditions. Mr. Darden also emphasized the need for the maintenance of high standards of workmanship and at the same time keeping shop costs low, these two somewhat conflicting requirements being kept in the proper balance by the good judgment of shop superintendents, master mechanics, general foremen, enginehouse foremen and, in fact, all shop and enginehouse supervisors.

One of the most important of the reports was that on "Minimizing Federal Defects," presented by Chairman C. M. Hillman, general foreman, Minneapolis & St. Louis. Another committee report on a subject of considerable present interest was entitled "Maintenance of Gas-Electric Equipment," prepared by a committee headed by Chairman M. A. Slack, general foreman, New York, New Haven & Hartford.

Mechanical Conventions in 1935

At a meeting of representatives of the various mechanical supervisors' associations, held September 18 at the Hotel Sherman, Chicago, it was tentatively agreed to hold the next full-membership meetings of these associations at the same time and place so that a single exhibit of railway equipment and supplies will serve equally well for all of the associations. The selection of a central location will also contribute to economy in travel and thus facilitate resuming the annual conventions, which, in some cases, have been discontinued for a period of four years.

Tentative plans have, therefore, been made to hold the next annual meetings of these associations in two groups early in May, 1935, at the Hotel Sherman, Chicago. The first group, including the Traveling Engineers' Association, Air Brake Association, International Railway General Foremen's Association and the Car Department Officers' Association, will hold individual but simultaneous meetings on Thursday, Friday and Saturday, May 2 to 4, inclusive. The second group, including the International Railway Fuel Association, Master Boiler Makers' Association, American Railway Tool Foremen's Association and International Railway Master Blacksmiths' Association, will meet on Monday, Tuesday and Wednesday of the following week. Recommendations from these associations will thus be available in time for consideration at the meetings of the American Railway Association, Mechanical Division, which it is planned to hold at Atlantic City, N. J., in June, if business conditions permit.

The exhibition to be held in connection with the 1935 meetings of the mechanical supervisors' associations at Chicago will be provided by the Allied Supply Association.

Motor Transport Section

The Eight New Coaches Just Prior to Entering Service

Burlington Expands Bus Operations

Adds through-service routes to system of train replacement lines, which have permitted substantial savings in railway operating expenses

WITH five years' experience in the operation of train-replacement motor coach lines, the Burlington Transportation Company, highway subsidiary of the Chicago, Burlington & Quincy Railroad Company, has expanded its bus system by the establishment of two through routes. These new routes were inaugurated to meet the public demand for such service, it being the feeling of the Burlington that it should undertake to meet the demand as the transportation agency that had served the territory for years.

The first through motor coach route inaugurated was one between Chicago and Moline, Ill., Rock Island and Davenport, Iowa. On this 184-mile line, two round trips per day have been operated since April 9. Still more recently, the Burlington Transportation Company has begun the operation of through bus service between Chicago and Omaha, Neb., with two round trips daily over a route paralleling the Burlington main line. Eight new motor coaches have been purchased to provide the new service. These coaches have a capacity of 33 passengers, with drop seats to accommodate 7 more, and are of the most modern, streamline type built by General Motors. The rates for transportation on the through lines are somewhat less than comparable railway rates, and the initial results of the new services have been encouraging.

The Problem of Local Service

On the Burlington, as on other railways, the dwindling of local passenger traffic in recent years has created a difficult situation, a situation which raises the question, "Should and can service of a reasonable frequency and a satisfactory character be maintained on lines where the volume of business is small, especially at a time when the railways' revenues in general are at a low ebb and inadequate to stand any avoidable drain?" It has been the policy of many railways operating in sections of other than the densest population to meet this situation by reducing their local passenger train service sharply, on both main lines and branch lines. This policy, while effective in reducing operating losses, at the same time has made railway passenger service on many lines revert virtually to a skeleton basis. Although no particular hardship is suffered by the public as a result of this policy, because the public has been using other forms of transportation anyway, it has the disadvantage, considering the chances for future railway passenger traffic, that it forces the public to make use of some other means of transportation and removes any opportunity for restoring the habit of travel by rail. Other roads have continued to maintain their local train service, even though the traffic handled by the trains has been small, either out of a sense of duty to the public, or to avoid a permanent loss of contact with the users of local train service.

Frequent Service Still Provided

The Burlington has pursued this latter course. On a number of lines of naturally light-traffic character, it has constantly maintained service of high character and extraordinary frequency. For example, 8 schedules are operated in each direction daily between Galesburg, Ill.,

The New Fleet Attracted Much Attention at the Century of Progress Exposition

and Ottumwa, Iowa, 6 schedules in each direction daily between Galesburg and Peoria, Ill., 4 schedules in each direction daily between Des Moines, Iowa, and Osceola, 4 schedules in each direction between Ottumwa and Des Moines, 5 schedules in each direction daily between Lincoln, Neb., and Grand Island, 5 schedules in each direction daily between Lincoln and Hastings, Neb., and 14 schedules in each direction daily between Omaha, Neb., and Lincoln. On these and other sections of its railway, the Burlington, in spite of declining passenger traffic due to automobile competition and to depressed business conditions, is maintaining a character of passenger service favorably comparable to that which was maintained in the most prosperous years.

Prohibitive Expense Avoided by Bus Use

The Burlington has been able to keep its local passenger service on a high grade, and to do so at a cost representing something less than a prohibitive expense, only because of its co-ordination of railway and highway transportation service. Steam trains, rail motor cars and especially motor coaches are all used to maintain frequency of schedules. Between Peoria and Galesburg, for example, all three types of carriers are used to protect the frequent schedules. The same is true between Des Moines and Osceola and between Omaha and Lincoln. In most cases of such marked service frequency, the majority of schedules are handled by the motor coaches, thus contributing to the maintenance of service at the lowest possible cost, because the Burlington has found that it can operate its buses at from 16 cents to 18 cents per mile, or only a fraction of the cost of steam passenger train operation.

The Burlington first began to co-ordinate railway and highway service in its territory five years ago. On February 14, 1929, it organized a subsidiary, the Burlington Transportation Company, to engage in the transportation of passengers by motor vehicle. All of the transportation company's $500,000 of capital stock is held by the railway.

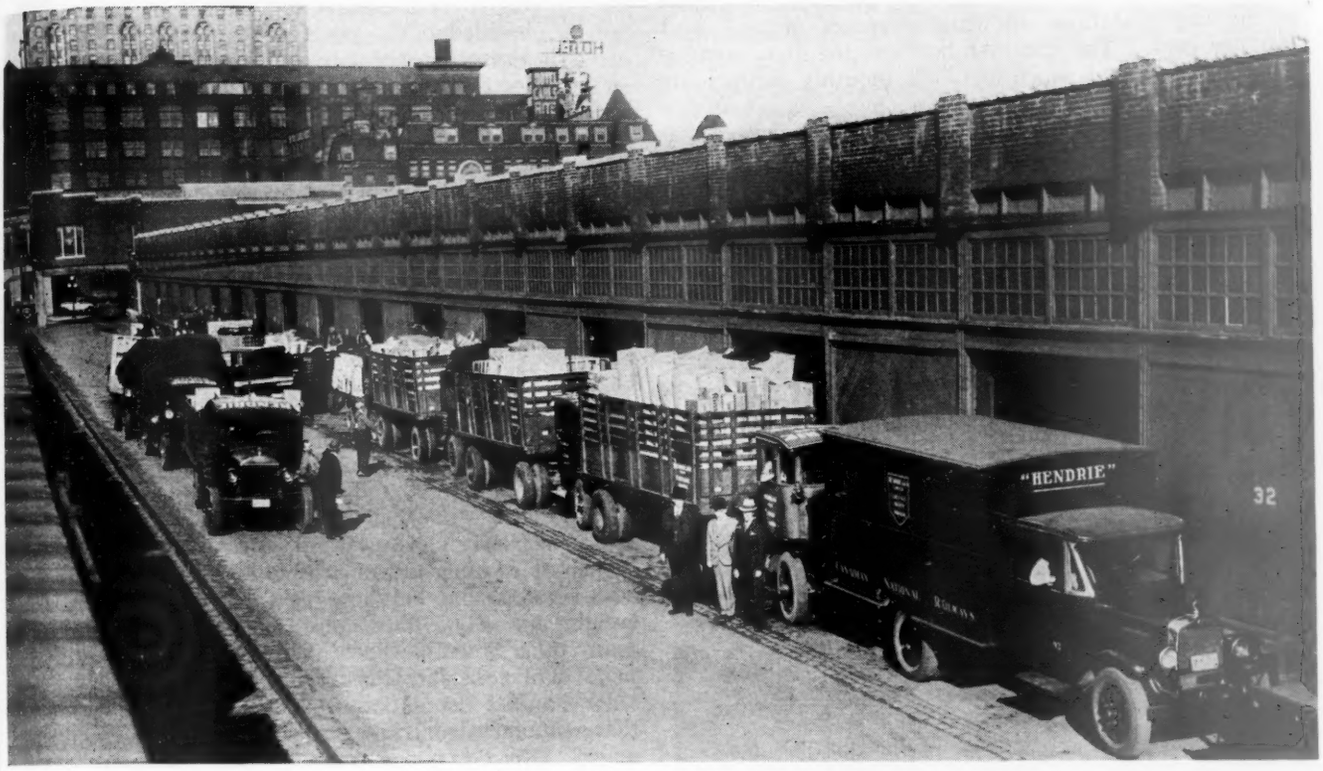
Beginning of Bus Operations

The initial bus operations of the transportation company, on three routes in Nebraska, began on April 9, 1929. Substantial progress from this small beginning was made in the ensuing months, until on December 31, 1929, franchises permitting the operation of both interstate and intrastate motor coach service had been secured and put to use covering 858 miles of highways in Burlington territory. Of the total highway mileage operated at that time, 266 miles of routes had been acquired by the purchase of bus companies already in existence, while the remainder had been surveyed and originated by the transportation company.

At the end of 1929, the transportation company owned 37 motor coaches and was operating 5,281 bus-miles daily. Although the buses ran parallel to Burlington trains all the way along the main line from Galesburg to Omaha, no attempt was made at that time to provide a through service. The train service did that; the buses merely filled in the gaps in the schedules for local passen-

(*Continued on page 353*)

One of the New G.M.C. Streamline Coaches Operated on the Through Routes



Outgoing Freight from Toronto

Makes Scientific Study of Storedoor Operations

Canadian National keeps close check on results of pick-up and delivery—Upward trend in traffic noted

Part I

WITH the idea of making a thorough experiment with collection and delivery service, the Canadian National began such service in southwestern Ontario on March 6, 1933, and has continued it to date, with a careful and current study of the results accomplished. This innovation in less than carload freight handling became so popular at once and has been so well received by the public since, that the decline in the railways' tonnage in favor of highway trucks was checked immediately, and, from the first, an upward trend was noticeable.

Comparative Territories

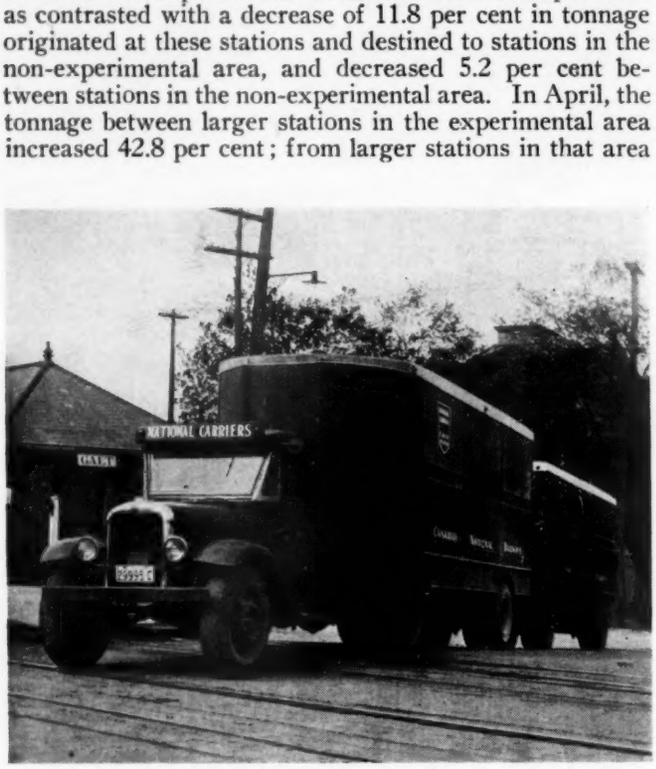
The operation of this service on the C. N. R. differs from other similar services in some respects, particularly in the fact that a most favorable and unique opportunity was taken to estimate progress from month to month. An area immediately contiguous to the experimental area was decided upon for purposes of comparison. This area has an approximate equality in mileage, shipping, business and weather conditions generally; comparable conditions as to trucking competition also exist, not only as between stations in this area, but to or from stations in the experimental area as well. Both areas were as nearly equal in every way as possible, the size of the experimental area being indicated by the fact that collection and delivery service, originally limited to 52 stations and a maximum haul of 224 miles, was extended, after five months' operations, to include 50 additional stations, with a maximum mileage of 370 miles.

During the first year of the experiment, the short haul l.c.l. tonnage in the area where pick-up and/or delivery service was not provided decreased 22.7 per cent compared with the previous year, and decreased 15.6 per cent as between stations in this area and the experimental area. The C. N. R. officers state that there is no question in their minds but that the results would have been equally disappointing in the experimental area without the new service.

As it was, however, during the first six months operation in the experimental area, the short haul l.c.l. tonnage increased 2.3 per cent, and during the second six months, an increase of 35.2 per cent was shown. In the months since the expiration of the first year's operation, the

increase has been averaging about 40 per cent, wi h some of the larger stations showing increases of well over 100 per cent. The contrast between the two areas is still more marked when detailed monthly figures are considered.

In March of this year, tonnage between larger stations in the experimental area increased 35.7 per cent as contrasted with a decrease of 11.8 per cent in tonnage originated at these stations and destined to stations in the non-experimental area, and decreased 5.2 per cent between stations in the non-experimental area. In April, the tonnage between larger stations in the experimental area increased 42.8 per cent; from larger stations in that area



Type of Equipment Used Between Kitchener and Brantford

to stations in the non-experimental area it increased 5.7 per cent, and between stations in the non-experimental area it decreased 3.4 per cent.

These statements show conclusively the results obtained from the experimental system, and offer a satisfactory reply to the question so frequently asked: "What portion of the increased tonnage was actually recovered from the highway trucks?"

Truck Licensing and Control

The service was carried on under the laws of the province of On'ario governing highway transportation of freight. Under these laws, all trucks are divided into five classifications, depending upon the service in which they are used. The intent of this classification is to license, control and supervise all vehicles employed for hire, pay or gain. Vehicles owned and operated exclusively in the transportation of "owner's goods" are not subject to these regulations. All licenses or permits are issued and supervisory control conducted by the Minister of Highways for the Province of Ontario, but no license or permit is issued without a certificate of the Ontario Municipal Board of Public Necessity and Convenience thereof.

An Act passed at the recent session of the Legislative Assembly of the Province of Ontario provides that—

The Lieutenant-Governor in Council upon recommendation of the Minister may make regulations respecting, among other matters:—

(a) The publication, filing and posting of tariffs, or tolls and the payment of tolls;

(b) Prescribe the method of bookkeeping or accounting to be used and the returns or statements to be filed:

(c) Prescribe, regulate and limit the hours of labor for drivers; and

(d) Prescribe the minimum age of drivers and minimum rates of pay or wages for drivers.

The Act further provides—

"No tolls shall be charged by the owner of any public commercial vehicle or by his agent or any other person in his employ or in his behalf, until the tariff of such tolls has been filed with the board."

"No reduction or advance in such tolls shall be made or accepted, either directly or indirectly in favor of, by or against any person."

Cost Study

In the year 1932, a unique opportunity presented itself to the railway to obtain first-hand information of trucking operations, and to make an intensive study of transport costs in what was at that time the largest motor transport company in the Province of Ontario—a transport owning and operating 106 vehicles, employing 125 persons and handling upwards of 50,000 tons of freight annually. This company was at that time, like many others, in financial difficulties. With monthly deficits of a considerable amount, after taking into consideration all elements of cost, the inevitable result was that voluntary bankruptcy proceedings were commenced a year later, or six months after the railway's experiment was instituted.

The company operated as a "Common Carrier," handling almost exclusively merchandise traffic and in one month its shipments aggregated 16,250, averaging 405 lb. per shipment. Its merchandise tonnage was equivalent to 99.6 per cent of its entire tonnage.

Its unit costs, as developed by the railway, were set up in three principal factors, viz:—

1. Pick-up and/or delivery services, including percentage of garage shop, transfer platform handling, local telephone services, relief local vehicles held for emergency or peak load requirements, vehicle depreciation, interest, license fees, supplies and other incidental expenses directly chargeable thereto—$0.0956 per 100 lb. originated.
2. Transport services, including percentage of garage shop expenses, transport dispatching, relief or emergency vehicles, vehicle depreciation, interest, license fees, supplies and other incidental expenses directly chargeable thereto—$0.0016 per 100 lb. per mile.
3. Administration and clerical, including all other items of expenses not specifically included in the foregoing—$0.0443 per 100 lb. originated.

It was on these costs that the tariff was based.

Simplified Tariff

Another feature in the C.N.R. pick-up and delivery service is the simplification of the tariff covering shipments so moving. Under the tariff, all articles of less-than-carload freight classified as such in the Canadian Freight Classification are grouped into one standard class, with the exception that the rates do not apply on pieces or packages which cannot be loaded into a standard box car or through the side door thereof; dynamite and high explosives, live poultry, livestock or bulk freight.

The rates approximating the foregoing transport costs are about equal to rail third class station-to-station rates and include pick-up and/or delivery services at cartage stations. They return a margin of profit to the railway

over and above rail-cartage costs. They also apply on traffic to or from non-cartage stations in the experimental area, but free street services are only provided when origin or destination of freight is a cartage station. The minimum charge for a single shipment from one consignor to one consignee, or one bill of lading, is 50c, and the minimum rate is 30c per 100 lb. The tariff is optional with shippers.

The tariff confines pick-up and/or delivery services at cartage stations to the corporate limits of the municipality, but in practice this is not rigidly observed, in that in many cases industries are located outside of, but immediately adjacent thereto, and these industries are served in the same manner as if located within the cartage limits, as described in the tariff.

The tariff specifies the patron's doorway or platform as the point of pick-up or delivery of traffic but exceptions are made thereto by cartage agents in meeting without additional charges, the wishes and convenience of patrons; and when circumstances warrent, they offer assistance in picking up or delivering goods to or at a more convenient place on the patron's premises.

Patrons wishing either pick-up or delivery services or both are requested by the tariff to notify the railway agent at point of origin or destination. In practice, however, it has been found much to the convenience of patrons, and to the mutual advantage of both the railway and the cartage agent, for the cartage agent to maintain a close contact with shippers and receivers, to study their requirements, and to be on hand at the most convenient time.

Damage Negligible

The standard packing requirements have been set aside, and articles are accepted when packed in such condition for shipment as to render the transportation thereof reasonably safe and practicable. Each package must show the name and complete address of the consignee. The freight claims on shipments handled in this service have been negligible.

The simplification of the rates offers potentialities for reduction in freight office costs; and although these costs have already been reduced to some extent, the maximum benefit therefrom is not possible by reason of the fact that this experimental system represents such a small proportion of the total waybills issued.

It is of particular importance to mention that the popularity of the experimental services and the results thus obtained show in an outstanding manner what has been accomplished by personal solicitation and by the individual attention given to each and every shipment, in that no money was expended by the railway for advertising purposes.

Cartage Agents

Another reason for the success of the service is the care exercised in selecting cartage agents and insuring their responsibility. All contract cartage agents are insured with fidelity bonds in favor of the railway and ranging from $500 to $1,000 or more. The premiums thereof are paid by the railway. They are also liable and responsible under the terms of the railway standard cartage contract for all goods while in their custody, also for the collection of freight charges, and are required to secure receipts for goods when delivered. Further, they are empowered to sign the railway agent's name to shipping bills or bills of lading when picking up goods.

The railway exercises the utmost care in the selection of its cartage agents. Preference is given to those already established in business, who have contacts with the shipping public, and who own and operate the proper type of vehicle equipment. Only one cartage agent is contracted with at each place; and under no circumstances are any allowances made by the railway to other truckers, or to firms who prefer to do their own trucking to or from the railway's premises. The rates paid cartage agents vary from four to six cents per 100 lb. based upon total tonnage handled inward and outward and settlements are made periodically, on the 7th, 14th, 21st and last day of each month.

Burlington Expands Bus Operations

(*Continued from page 350*)

gers. Of the fleet of its equipment, 27 motor coaches had been purchased new, while the remainder had been taken over in the acquisition of bus lines already in existence. Practically all of the equipment was of the 21-passenger type, studies made by the Burlington having shown that equipment of this capacity would be most satisfactory and economical of operation in the territory where it was to be used.

As had been expected, there were operating losses at the outset. Intensive traffic development work, however, soon began to exert an influence, and the earnings per bus-mile showed progressive increases month by month throughout 1929. The great benefit of the provision of motor coach service, aside from that enjoyed by the public by reason of the continued frequency of service, was the saving in operating expenses which the railway was able to make because of its substitution of motor buses for trains. In putting on bus schedules, the railway was able to reduce train service on seven lines and eliminate it on one stub line, as well as to reduce the number of stops made by certain trains continued in service. At the end of 1929, the savings to the railway resulting from the substitution of buses for trains were accruing at the rate of $45,000 per year.

In 1930, there was further expansion of the operations of the transportation company and, consequently, increased savings to the railway by reason of the bus-for-train substitutions worked out. At the same time, careful studies were constantly made of the bus routes already in service, and where experience and the outlook for the future indicated that the available business would be insufficient to support even the highway service, and that at the same time there was no opportunity to co-ordinate the bus service with rail service to further reduce railway operating expenses, the bus operations were reduced or discontinued.

Substantial Savings in Railway Expenses

At the end of 1930, the transportation company was operating 1,024 miles of bus routes and its buses were operating an average of 5,317 miles per day. These operations enabled the railway to save in its operating expenses at the rate of $117,163 per year. If this saving had been credited to the transportation company, its operations during 1930 would have shown a profit of $21,839. Furthermore, it would have been logical so to credit the transportation company because the greater part of its deficit was caused by unprofitable bus service established and maintained for no other reason than to permit the discontinuance of unprofitable train service and to effect savings in railway operations in excess of the consequent loss incurred by the transportation company.

Since 1930, general business conditions and the extreme necessity for retrenchment have necessitated some slight contraction of the Burlington Transportation

Company's operations. In 1931, the number of miles of highway routes covered was 1,031, 7 miles more than in 1930, but the average number of bus miles operated daily was 4,894, or approximately 500 miles less than in the previous year. In 1932, there was a further small decline in operations, the schedules maintained calling for an average of 4,713 bus-miles per day. In 1932, there was a decrease of 21.6 per cent in the operating revenues of the transportation company and a decrease of 24.9 per cent in the number of passengers carried, as compared with 1931, but this showing did not suffer greatly by comparison with that of the railway, upon which passenger revenues decreased 34 per cent and the number of passengers carried 21 per cent. More than offsetting the operating losses of the transportation company, even in 1932, was the continued saving in operating expenses which it enabled the railway to make. This saving from the substitution of buses for steam trains in 1932 was $166,650. For 1933, this figure was increased to an annual saving of $175,186, and, in 1934, the average saving per month has been $14,614.

In 1933, a total of 1,680,153 bus-miles were operated. There was a decrease in operating revenues and in the number of passengers carried in Burlington buses, but this was smaller than in 1932.

At the present time, with its through service as well as its train-replacement routes, the Burlington Transportation Company is operating a fleet of 52 motor coaches. Operations are carried on under the supervision of W. E. Fuller assistant to the vice-president of the railway, who is also vice-president of the transportation company. The bus system is divided, for operating purposes, into two divisions, the western division being in charge of F. D. Hite, general manager at Omaha, Neb., and the eastern division in charge of H. W. Stewart, general manager at Galesburg, Ill.

The train-replacement bus operations are being continued as before, the buses running on schedules fixed with the purpose of supplementing the remaining train service on parallel lines. Thus, the transportation company will continue to assist the railway in providing frequent and attractive local passenger service at the lowest cost and will permit the further saving of substantial sums in operating expenses.

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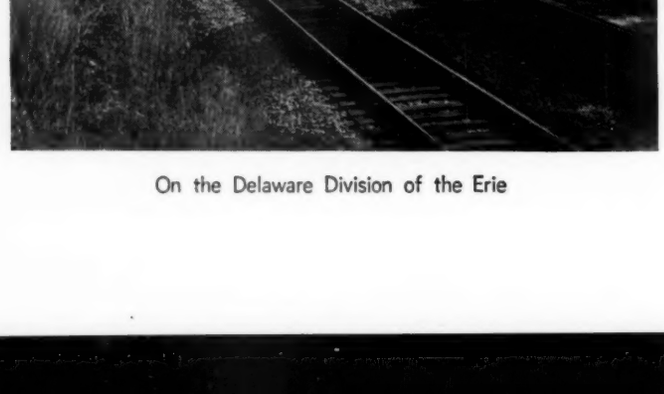

On the Delaware Division of the Erie

Odds and Ends . . .

Mammoth on the Right of Way

During the widening of the Great Western Railway line at Cogload Junction near Taunton, England, the remains of a prehistoric mammoth were unearthed. An upper molar tooth weighing several pounds, parts of other teeth and the tusks were discovered, and presented to the Somerset County Museum at Taunton. The mammoth was of the *elephas primigenius* species and was the most characteristic animal of its period in England. It probably stood nine feet high at the shoulders and weighed over four tons.

Religion on Wheels

A church train is run every Sunday morning by the London North Eastern Railway from Riccarton Junction to Hawick or Newcastleton. Riccarton is a creation of the old North British Railway, which authorized the erection of houses, post-office and a school for the benefit of employees stationed at this remote spot. To meet the demand for a place of worship the railway instituted the "church train" which averages 20 miles a week and, in addition to providing religious services, permits the exchange of visits with relatives in the lowlands.

Overseas Overcharge

A railroad reaches its hand across the seas, if necessary, when it discovers that it has overcharged a patron. This was disclosed a few days ago when the Northern Pacific passenger department learned through an audit of its passenger receipts that it had collected $3.21 excess fare from a Montana farmer who had gone to Germany to make his home. At Stevensville, Mont., in December, the company's agent sold two full fare and two half fare tickets to Henry Schuldt and family. Their tickets called for passage from Stevensville to a point in Germany. The Stevensville agent made inquiry at the St. Paul headquarters of the company for the fare for trans-Atlantic traffic. Occasionally errors are made and in this case a check of the agent's report disclosed such an error. The railway company set about to refund the $3.21, according to E. J. Johnson, auditor of passenger receipts, and endeavored to locate the head of the family. It was necessary first to contact the steamship line offices and finally the First State Bank at Stevensville, where it was learned that Mr. Schudlt, his wife and two children had gone to Munsterdorf, Germany. To that point the refund check was sent.

Caboose Office 18058

On November 6, 1926, an employees' traffic soliciting committee on the St. Louis division of the Chicago, Rock Island & Pacific, established an office in caboose 18058. Two dozen envelopes constituted the filing system, a portable typewriter was mounted on a wooden box, and the work began. Today, nearly every traffic manager in the country knows about caboose 18058. As compared with office expenses of $504, the revenue received from traffic thus solicited amounted to $217,838 at the end of 1933.

The caboose is now on exhibit at A Century of Progress Exposition, and invitations to visit it are being sent out on train order blanks in true train order style. The orders read as follows:

We invite you to run extra leaving your office any day with right over all trains to Caboose Office 18058 at the Century of Progress. Make schedule to suit your convenience. The men of the rail on the St. Louis division of the Rock Island Lines extend you our best wishes and invite you to drop in and see our contribution to the Century of Progress, the first caboose office in the U. S. A. A real caboose—a real office built for service, manned by part of the gang who hustle the Rock Island hot shots between old St. Louis and the Heart of America—Kansas City.

Yours on the main line,

JIM BULLARD, *Conductor and Chairman of Committee*

JOHNNY MORROW, *Brakeman*

Communications and Books . . .

High Salaries Seen as Psychologically Unsound

GORHAM, ME.

TO THE EDITOR:

Some months ago I read a lengthy editorial in the *Railway Age* defending high salaries for the executives. I think the enclosed,* as far as I have observed, gives the general opinion of the common people and voters on that subject. It may not affect the stockholders in a monetary way to pay large salaries but the psychological effect on the people is bad for the railroads. The employees get the support of the people in their drives for excessive pay, pensions, etc.

As an investor of some savings in railroad stocks, I felt indignation over Congress' passage of the Railroad Pension Law. I am sorry that the railroad executives are beaten by the railroad brotherhoods in every controversy. It seems to me the executives might be more efficient in protecting the stockholders.

With the railroads in their present plight, I certainly hope, because of its psychological effect, you will not again advocate any executive salaries like $100,000 a year.

RALPH C. STONE.

* A clipping from a newspaper defending the railway pension bill and attacking the salaries of railway officers.—EDITOR.

New Book

America's Capacity to Produce, by Edwin G. Nourse and Associates. 608 pages, 8 in. by 5¼ in. Illustrated with charts. Bound in cloth. Published by the Brookings Institution, Washington, D. C. Price $3.50.

This book, the first volume in a series of four studies dealing with the distribution of wealth and income in relation to economic progress, attempts to answer the following question: "Did actual production even in our most prosperous years utilize our full productive capacity, and if not, how much latent capacity was there which might have been drawn upon for the satisfaction of people's wants through some better method of handling our economic affairs?"

Thus the authors have endeavored to consider our system of production realistically as a technological process with a view to ascertaining the general trend of capital expansion in the United States and the capacity of our productive plant and labor supply to produce the goods and services which society requires. All of this is a formidable task of statistical analysis, requiring many adjustments based on the judgment of the authors and the opinion of experts. But all statistical interpretations require a liberal exercise of judgment and such processes employed in this book are explained fully in the text or in the comprehensive appendices.

The work is divided into three parts, considering in turn: Raw Materials; Fabrication; and Services. Two general points of view are taken: The longitudinal, involving a study of the trend over the first three decades of the century; and the cross-sectional, involving a study of productive capacity for the year 1923, for 1929 and for the prosperous five-year period, 1925-29. Theoretical capacities with all producing units operating continuously on a multiple-shift basis are disregarded for, as is emphasized throughout, the study is seeking to determine practical realities of day-to-day and year-to-year operation, considering for each industry the normal practice as to single-shift or multiple-shift operation, seasonal factors, loss of time for repairs, etc. In other words, as the summary puts it, the title of the book might well be expanded to read somewhat as follows: "America's capacity to produce during the period from 1900 to 1930 with the capital goods and labor force which she then possessed and with the technology and general pattern of operative and commercial organization then prevailing."

On the foregoing basis the study finds that in general the margin of unutilized plant capacity did not expand during the period from 1900 to 1930 and that our productive system as a whole was operating at about 80 per cent of capacity in 1929 and slightly less than that if the average of the five years, 1925-29, be taken. This 80 per cent operating ratio, however, is the composite, and thus some industries, notably transportation, were operating at a lower rate in the 1925-29 period. Conclusions on the transportation industry follow:

> It is abundantly evident from this analysis that the transportation industry of the United States has been greatly over-developed. In the railroad field the amount of unutilized capacity shows a great expansion over the 30-year period, particularly in the decade of the twenties. The increase of railroad capacity alone was sufficient—in aggregate terms—to accommodate all of the increase in traffic that occurred during this period of great economic expansion.
>
> In 1929 we were not using track capacity beyond 40 or 50 per cent, or rolling-stock capacity or terminal capacity, generally speaking, beyond 70 per cent. The available labor force was apparently adequate to handle a substantial increase in tonnage, though perhaps another 30,000 men, of the lower grades, would have been needed to operate at full capacity as measured by the rolling stock available. The great expansion of railway capacity in the later years of the period was due more to improvements in the quality of railway plant and equipment and in the efficiency of operation than to outright expansion of facilities. Capital was readily obtained for the additional investment that these improvements required.
>
> Other transportation agencies were also enormously expanded during this period. Pipe lines in 1929 were used to less than 50 per cent of capacity, and inland waterways and highways were probably used to less than one-third of their practical capacity. No precise estimates are possible as to the extent to which boat and motor vehicle capacity was unutilized, but it was probably not comparable with that found in connection with the railroads. In any event, such equipment could be quickly expanded merely by speeding up production in automobile plants and shipbuilding yards.
>
> We find in this field a remarkable illustration of the extent to which duplicate capacity may be developed for want of a co-ordinated national policy. The railroads, developed under private auspices, show in many regions a great duplication of competitive facilities, and in general a capacity greatly in excess of requirements. The waterways were constructed by government agencies, and on public credit, not for the purpose of providing needed additional transportation capacity, but rather with a view to reducing transportation charges to shippers. The highways were built primarily for the convenience of passenger vehicles, but with the incidental result of furnishing large freight capacity.
>
> As a result of this history two basic conclusions may be definitely stated. First, transportation has not been a bottle-neck restricting the expansion of agriculture, mineral, and industrial production during the period with which we are concerned. Second, without any increase in the fixed capital invested in our transportation agencies, and with only a moderate increase in equipment and labor supply, our transportation system could carry double the tonnage that was moved during the recent era of prosperity.

But after noting this transportation set-up and other specific instances of overdevelopment the authors assert nevertheless that their findings "do not bear out the contention of those who, in the midst of the present depression, say that we were living in a fool's paradise in 1929—that we were 'living beyond our means,' and that disaster had to follow. Individuals, of course, were living beyond their private means as individuals always will in both prosperity and depression. But the nation was not. We were not trenching on our resources of capital goods or of labor power. Equipment was being maintained at a rate entirely suitable to the indefinite continuance of operation at the 1929 rate of activity. There was an unutilized margin which, in the perspective of the past, would appear to be about normal. Labor in general was not being so driven as to impair either health or morale. On the contrary, there was nearly 20 per cent of reasonably available labor which was not turned into the productive stream. Our economic society lacked almost 20 per cent of living up to its means."

Subsequent volumes of the series will be: America's Capacity to Consume; The Formation of Capital; and Income and Economic Progress.

DEFINITE STEPS TOWARD A SOLUTION of the problem of competition between railway and highway transport in Spain have recently been taken, says a report from Madrid to the United States Department of Commerce. A Spanish government decree permits the railways there to operate freight and passenger services on highways parallel to their railway lines. The minister of public works is authorized to grant concessions for such operations, subject to future decisions or legislation of the Chamber of Deputies. Where the proposal involves the discontinuance of unprofitable passenger trains, however, such discontinuance must have the unanimous approval of a commission on railway and highway co-ordination as well as that of the Transportation Conference.

NEWS

Adjustment Board Awaits Funds for Its Expenses

Has been unable to function pending the outcome of efforts to obtain money

Government planning of a method for settling railway labor disputes seems to have omitted an essential provision for paying the expenses of the National Railroad Adjustment Board and of the new National Mediation Board created by the amendments to the railway labor act of 1926 passed by Congress in the closing hours of the last session. As a result, it is understood, the national adjustment board has been unable to function and some of its members have returned to their homes awaiting the efforts of the mediation board to obtain money from the Public Works Administration or elsewhere. The law provided for no appropriation for the adjustment board although it provided that the members should be compensated by the railroad or labor organization parties they were to represent. The board was, however, authorized to employ and fix the compensations of such assistants as it deemed necessary in carrying on its proceedings, subject to the approval of the mediation board, which was also to pay the compensation of such employees. Headquarters of the board and of its several divisions were to be located in Chicago and the law provided that whenever practicable the several divisions or subdivisions of the board should be supplied with suitable quarters in any federal building located at its place of meeting.

However, space in federal buildings in these days is at a considerable premium and moreover the only appropriation for the mediation board is that which it had inherited from its predecessor, the old Board of Mediation, which had been fixed by an appropriation bill passed before the enlarged functions and expenses of the new board had been provided for by the labor act amendments. The Public Works Administration has been the usual source of revenue for new government organizations created by order of the President and therefore without the usual appropriation by Congress, or even those created by Congress whose functions were left so largely to executive discretion that it was regarded impossible to estimate an appropriation for them in advance, as well as for regular government establishments that desire to spend more money than Congress had appropriated for them, and the mediation board has applied to the P.W.A. for the money it needs to carry out the law, but it is still awaiting a final decision. It is understood that the President issued an executive order approving an allotment for the adjustment board but that the Comptroller General thus far has taken the position that the adjustment board is not a public works project and that the law says nothing about paying its rent. The board has selected office space in Chicago but is unable to occupy it pending further efforts in Washington.

Scrip Books for Baggage

In an effort to aid commercial travelers, western railroads have placed on sale a $15 baggage scrip book for $10, a reduction of 33⅓ per cent. Baggage allowance under the reduced fares in western territory has been 150 lb. and excess baggage was charged for at the full rate. Under the new arrangement, commercial travelers can pay for their excess baggage with scrip books.

B. & O. to Transfer N. Y. Marine Operations to Jersey City

New York harbor floating and lighterage operations of the Baltimore & Ohio will on October 1 be transferred from the Baltimore & Ohio terminal at St. George, Staten Island, to the terminal of the Central of New Jersey at Jersey City, N. J. When the transfer is completed the only B. & O. cars entering the St. George terminal will be those destined for local delivery on Staten Island.

Fishing Rodeo Creates Business

The first annual Rio Grande Valley fishing rodeo held at Port Isabel, Tex., on August 8 to 12, under the sponsorship of local sportsmen in an effort to create interest in fishing and to bring travelers to the Rio Grande Valley, attracted a total of 207 contestants, in addition to the attending members of their families. Traffic moving to the rodeo originated at such points as Shreveport, La., Hot Springs, Ark., Houston, Tex., St. Louis, Mo., and San Antonio, Tex.

Rumors on His Transport Proposals Premature, Says Eastman

Commenting on various published rumors as to additional proposals for transportation legislation that he may make, Coordinator Eastman, on Thursday, told newspaper men that they were all premature. He said that there is at present no complete plan. He is still working on various proposals as to several phases of the problem with a view to making additional recommendations supplementing those he has already made specifically or tentatively.

Survey of All Rail-Water Routes and Rates Asked

Railroad petition, filed with I. C. C., requests reconsideration of joint arrangements

A reconsideration by the Interstate Commerce Commission of the entire question of through routes and joint rates between rail lines and inland water carriers, including that of the differentials between rail and barge rates, is asked in a petition filed with the commission by the railroads that are parties to cases in which such routes, rates and differentials have been approved or prescribed by the commission, asking that the cases be reopened.

The railroads take the position that the routes, rates and differentials involved have been fixed without adequate, comprehensive or complete records dealing with the reasonableness and lawfulness of such through routes and joint rates, the extent to which they result in wasteful and uneconomical transportation, the reasonableness and lawfulness of the differentials, the value of the service and the cost of transporting freight by all-rail routes as compared with the cost by routes composed in the part of the service of the Inland Waterways Corporation, and that the time has come for a complete reconsideration by the commission on an adequate record.

The petition says the rail carriers will be able to show that a very large number of the through routes and joint rates that they were required to establish in connection with the water service of the Inland Waterways Corporation result in wasteful and uneconomical transportation and that the commission should reconsider the matter to the end that it may be able to determine whether the government barge service is economically justified and its effect upon the revenues of the rail carriers.

Contemporaneously complaints were filed by the railroads asking the commission to enter upon a hearing concerning the reasonableness and lawfulness of the routes and rates prescribed on applications of the Inland Waterways Corporation, the Mississippi Valley Barge Line and the American Barge Line and the reasonableness of the minimum differentials fixed or approved.

Glacier Park Business Up 60 Per Cent

According to estimates as of the end of August, 120,000 persons entered Glacier National Park in the present season, the total being a 60 per cent increase over 1933 and a 44 per cent increase over 1932. Rail travel to the park is estimated to be double that of 1933.

Continued on next left-hand page

NEW CONDITIONS

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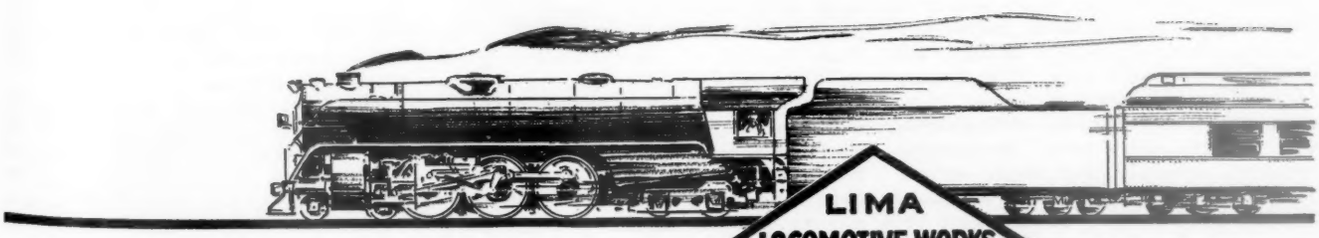

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Transport Improvements Carry Widespread Benefits

Will, if rightly utilized, have favorable effect on capital goods industries, says Eastman

Improvements in the art of transportation already made and those which are impending if rightly utilized will have benefits of very wide range and reach and will be of considerable benefit to the capital goods industries of the country, Joseph B. Eastman, federal co-ordinator of transportation, said in an address before the National Petroleum Association at Atlantic City on September 13. Reviewing the present transportation situation and the investigations being conducted by his organization, Mr. Eastman said that while the main present trouble with the railroads is the low volume of their traffic and a marked revival of general business would do more than anything else to help the railroads, "at the same time there is much of the vicious circle in the situation, because the railroads are among the largest consumers, and when they curtail their buying, as has happened in large degree, that in itself has a very depressing effect on general business."

"The revival of business would have a fine effect on the railroads," he continued, "but on the other hand railroad revival would have a most excellent effect on business. The government has realized this, and the loans, amounting to nearly $200,000,000, which the Public Works Administration has made to the railroads on favorable terms for much-needed new rails, equipment, and general maintenance work have been of decided benefit to the capital goods industries as well as to the railroads. I hope and expect that this policy can be continued."

Next to the general depression, Mr. Eastman said, the thing which has hurt the railroads most severely has been the greatly increased competition of other forms of transportation and he reiterated his advocacy of federal regulation of motor and water carriers. His staff has been going thoroughly into the subsidy question, he said, covering all classes of carriers, and expects to be able before long to announce definite conclusions on the facts and to recommend whatever legislation may be needed to correct any situation found in need of correction.

"All transportation agencies need public regulation," Mr. Eastman said, "as a protection against over-development and destructive competition from irresponsible operators in their own ranks and from other transportation agencies, and to promote conditions of order, stability, and growth along sound lines. The country needs it as a protection against gross waste, unknown, unstable, undependable, and discriminatory rates, irresponsible operators, uncertain and unsafe service, unsound labor conditions, and a general financial demoralization which always reacts against those who use transportation as well as against those who invest in it."

Mr. Eastman also commended to the the attention of his audience the report on the handling of merchandise traffic. "Time must be allowed for such a report to percolate through the railroad and shipping world before definite results can be expected," he said, "but the percolation is proceeding at a reasonably rapid rate." Referring to other investigations under way he said that with the help of the Department of Labor his staff has been going into the allegation that labor conditions are below par in some of the transportation agencies and that this introduces an element of unfair competition. Conclusions and recommendations on this subject will be reported shortly.

Consolidations of railroads are not a panacea for railroad ills, Mr. Eastman said, but there are opportunities for their useful employment in the future. If consolidations could be achieved without "preliminary forays of money spending," through the use of securities and without the use of cash, it would be of great public advantage. This problem is also receiving attention. Regarding the railroad retirement act, Mr. Eastman said that while he was not satisfied with it because he believed it has not been thoroughly worked out and that its adoption could well be deferred, "nevertheless the act is sound in principle, and it will not be so much of a burden upon the railroads as they would have the country believe."

In conclusion Mr. Eastman said:

"So long as transportation agencies are privately owned and operated, there is little that the government can do to further their welfare, short of actual subsidies, except to maintain a system of regulation which will, without paralyzing initiative, prevent exploitation, discourage destructive competition, promote order and stability, and permit an adequate return to be earned on legitimate investment, and also to extend every possible aid, consistent with public safety and the well-being of employees, to improvements in management, operation, and financial organization which will tend toward more and better service at the lowest possible cost to the public served. Given such conditions, the remainder of the problem must be left for the private managements to answer. I have tried, in my work as Federal Co-ordinator of Transportation, to be guided by these principles."

I. C. Addresses Its Message to School Children

In an effort to familiarize persons in Illinois with the importance of the railroads and thus further its public relations work, the Illinois Central has prepared a 50-page booklet entitled "Trails to Rails," a story of transportation progress in Illinois, which it is distributing to 116,000 pupils in the seventh and eight grades of the public schools throughout the state. The book is divided into 11 chapters which trace the development of transportation from native trails to the present day; an epilogue which summarizes the importance of railroads to the individual and to communities; and a bibliography. It appeals to the adult as well to the child and contains 60 pictures and drawings.

I. C. C. Report and Order in Western Divisions Case

Decision allows western trunk lines an increase in trans-Missouri rate divisions

The Interstate Commerce Commission on September 14 made public a report and order, dated July 10, on further hearing in connection with its investigation In the Matter of Divisions of Freight Rates in Western and Mountain-Pacific territories, finding that the present divisions of transcontinental joint rates accruing to western trunk lines and trans-continental carriers are not unreasonable or otherwise unlawful, but that the divisions of joint rates to and from trans-Missouri territory, except Montana, are unjust, unreasonable and inequitable. A revised basis of divisions is prescribed, to become effective January 1, 1935, reducing the divisions accruing to the trans-Missouri carriers and increasing those accruing to the western trunk line carriers.

The commission finds that on trans-Missouri traffic other than that to and from southeastern Kansas just, reasonable and equitable divisions hereafter to be received would be based on a modified mileage prorate, using as factors for the western trunk lines the short-line distances between the Missouri river gateway through which the traffic moves and points to or from which the traffic is carried by the western trunk lines and for the trans-Missouri lines the short-line distance between the Missouri river gateway and the point of origin or destination in trans-Missouri territory, the distance factor for the trans-Missouri lines to be increased 15 per cent. This finding is not to be understood as preventing use of group bases of divisions, employing existing groups or others similar thereto. A traffic study based on a test period in 1928 indicated that the present divisions produce about the same apportionment of revenues between the trans-Missouri lines and the western trunk lines as a mileage prorate in which the actual distances west of the gateways are inflated 25 per cent, being similar to the transcontinental divisions in this respect.

For traffic to and from southeastern Kansas a separate basis is prescribed, using percentages of the first class rates as factors via various gateways. Divisions of joint rates to and from Montana were not found unreasonable or otherwise unlawful.

The present divisions were based on agreements reached by the carriers effective July 1, 1925, after extensive hearings had been held in 1925 with respect to transcontinental divisions.

The proceeding was instituted by the commission on its own motion in 1923 and the commission has previously considered the joint rates between western trunk line and southwestern territories, requiring a readjustment yielding the western trunk lines approximately a 9 per cent increase, or perhaps $3,000,000 a year. Extended hearings with respect to the transcontinental divisions were held in 1925 and re-

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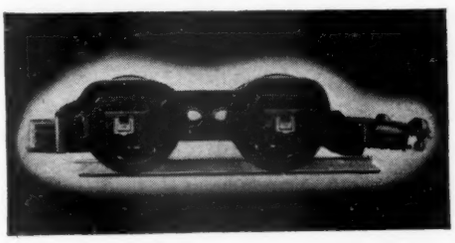

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NEW YORK CHICAGO MONTREAL

sulted in an agreement which is said to have yielded the western trunk lines in the neighborhood of $3,000,000 additional revenue per year. An agreement was also reached which gave the western trunk lines a 14 per cent increase in many of the trans-Missouri divisions which is said to have probably yielded the western trunk lines in the neighborhood of $2,000,000 a year. Later, in 1929, the commission deemed it desirable to proceed to a formal determination with respect to the lawfulness of these divisions as revised, over the objections of the transcontinental and trans-Missouri respondents.

The western trunk lines which sought increased divisions are the Alton, Chicago & Eastern Illinois, Chicago & North-Western, Chicago Great Western, Chicago, Milwaukee, St. Paul & Pacific, Minneapolis & St. Louis and the Wabash. Those opposed to any change in the trans-Missouri divisions were the Atchison, Topeka & Santa Fe, the Denver & Rio Grande Western, Great Northern, Northern Pacific, Chicago, Burlington & Quincy, Missouri Pacific, St. Louis-San Francisco, Missouri-Kansas-Texas, and Kansas City Southern. The Southern Pacific, Union Pacific, and Western Pacific also opposed any change in the transcontinental divisions and the Illinois Central, the Chicago Rock Island & Pacific, and the Minneapolis, St. Paul & Sault Ste. Marie remained neutral as to the trans-Missouri divisions.

In general the statistics of record with respect to carrier operations and other pertinent matters used in the report cover a series of years ending with 1928 or 1929 and the commission said that in its opinion these data furnish a sounder basis for conclusions than would be furnished by data relating to present abnormal conditions, but it said that if respondents are of a different opinion they are at liberty to ask for a further hearing. For some 50 years, according to the report, the transcontinental divisions were based approximately on a constructive distance of 1.5 miles for each mile west of the Missouri river gateways but by the agreement this was reduced to approximately 1.25 miles for each mile. In approving the transcontinental divisions the commission said that there is much reason to believe that the effect of grades and curves and like incidents of service through the mountainous districts upon the total cost of service over the transcontinental routes has been much exaggerated. "The mountains exist but so do the great plains over which heavily loaded trains can be moved under very favorable conditions." It said the case must be decided on the basis of the evidence of record, voluminous but most unsatisfactory, and that there was no other way of deciding it than by the exercise of general judgment after consideration of this evidence, such as it is. As to the trans-Missouri divisions it said: "The conclusion seems warranted that the transportation costs on trans-Missouri traffic are relatively somewhat higher than those of the western trunk lines, but that the difference is by no means so great as it is with respect to transcontinental traffic. The latter must all be transported through the mountainous country, whereas much of the trans-Missouri traffic originates or terminates in Nebraska, Kansas, or eastern Colorado, and Wyoming east of the mountains, traversing sections in which transportation conditions are only moderately inferior to those in western trunk line territory. In a basis of divisions reflecting a mileage prorate the trans-Missouri lines may properly be given some inflation but not so large in amount as that accorded to the transcontinental lines."

Chairman Lee dissented, saying the evidence did not justify a reduction in the divisions of the trans-Missouri carriers and that "on the stale record before us, inadequate because of the absence of matters which must be shown before we can act, in my opinion we are not justified in substituting our 'general judgment' of proper divisions for divisions established by agreement of the interested parties." Commissioner Aitchison joined in this conclusion. Commissioner Mahaffie also dissented, saying the decision seems to be based chiefly on inference and that the majority had found no such facts as to the costs of operation as to justify it. Commissioner Farrell concurred in this expression.

Ticket Scalpers Punished

In the Pennsylvania station, New York, on Sunday morning, September 16, 12 men were arrested for buying return portions of non-transferable excursion tickets and all were convicted in court. The men were taken shortly after the arrival of a train from Pittsburgh, Pa., and two of them gave addresses far from New York. Fines of $10 each were imposed on two; four, including three negroes, were sentenced to two days in jail, and two were sentenced to one day in jail. Four were released on suspended sentences.

N.R.A. Minimum Bus Fares Established

N.R.A. regulation of bus fares under the code for the motor bus industry has begun to take effect. The N.R.A. has announced that minimum bus fares over routes between New York and Chicago and New York and Washington would become effective at midnight on September 21 under an administrative order by Administrator Johnson approving a schedule of fares established by the motor bus code authority which were intended to become effective on June 30 but were held up as a result of appeals. General Johnson has now denied the appeals. The new Chicago-New York rate is $15.75.

Water Lines Desire to Participate in Rate Increase

Fourteen steamship companies participating with the railways in joint water and rail routes and rates in Atlantic, Gulf, and Chesapeake Bay services, including those controlled by the railroads, have filed with the Interstate Commerce Commission a petition asking for authority to make increases in freight rates similar to those asked by the railroads in Ex Parte No. 115.

The Inland Waterways Corporation has also filed a petition asking that, in the event the railroads are permitted to make the increase they have proposed, the joint rail and barge rates be increased in the manner proposed, but as a temporary expedient only and with the understanding that on the re-issue of the proposed temporary tariff supplements they be revised so as to reflect differentials between rail and water rates calculated by the usual methods and based on the corresponding all-rail rates as increased between barge line points.

Must Report Liquor Shipments in Illinois

Beginning on September 17, common carriers in Illinois must report within 15 days all shipments of alcoholic liquors going to consignees in that state, according to a new regulation of the Illinois Department of Finance. Such reports must state the date of shipment, number of car and names and addresses of shipper and consignee. Common carriers must furnish any further information asked by the department about particular shipments, and on the request of the department must report all liquor shipments consigned to specific areas in Illinois.

Great Western of Great Britain Augments Highway Fleet

The Great Western of Great Britain has recently placed orders for a total of 396 motor vehicles including 190 tractors and 206 trucks. An expenditure of approximately $782,500 is involved.

The new vehicles will be used to meet growing demands for the G. W. R. rural delivery services; to expedite other collection and delivery operations; to advance the company's plan for the motorization of its terminal operations; to provide for the increase in its parcels traffic; and also for railhead distribution and special contract work. In connection with the parcels service, the announcements stated that the number of such items handled by the Great Western has increased from 16,000,000 to 26,500,000 in 10 years.

Atlantic States Shippers' Board

The Atlantic States Shippers' Advisory Board will hold its regular meeting at the Ten Eyck Hotel, Albany, N. Y., on October 11. The executive committee will meet on October 10.

Among the subjects to be presented by this committee, will be the Simplification of Publication of Tariffs. On the evening of October 10 there will be a dinner to be held jointly by the Shippers' Advisory Board and the Capitol District Traffic Association, at which the principal speaker will be M. J. Gormley, president of the American Railway Association.

The Freight Loss and Damage Committee will display, on both days, exhibits of various types of freight containers, with interesting information on packing and other features.

Club Meetings

The Railway Club of Pittsburgh, (Pa.) will hold its next meeting at the Fort Pitt Hotel, Pittsburgh, on Thursday evening, September 27. Hon. John J. Cornwall, general counsel of the Baltimore & Ohio, will speak on "What of the Railroad Future?"

The Indianapolis, (Ind.) Car Inspection

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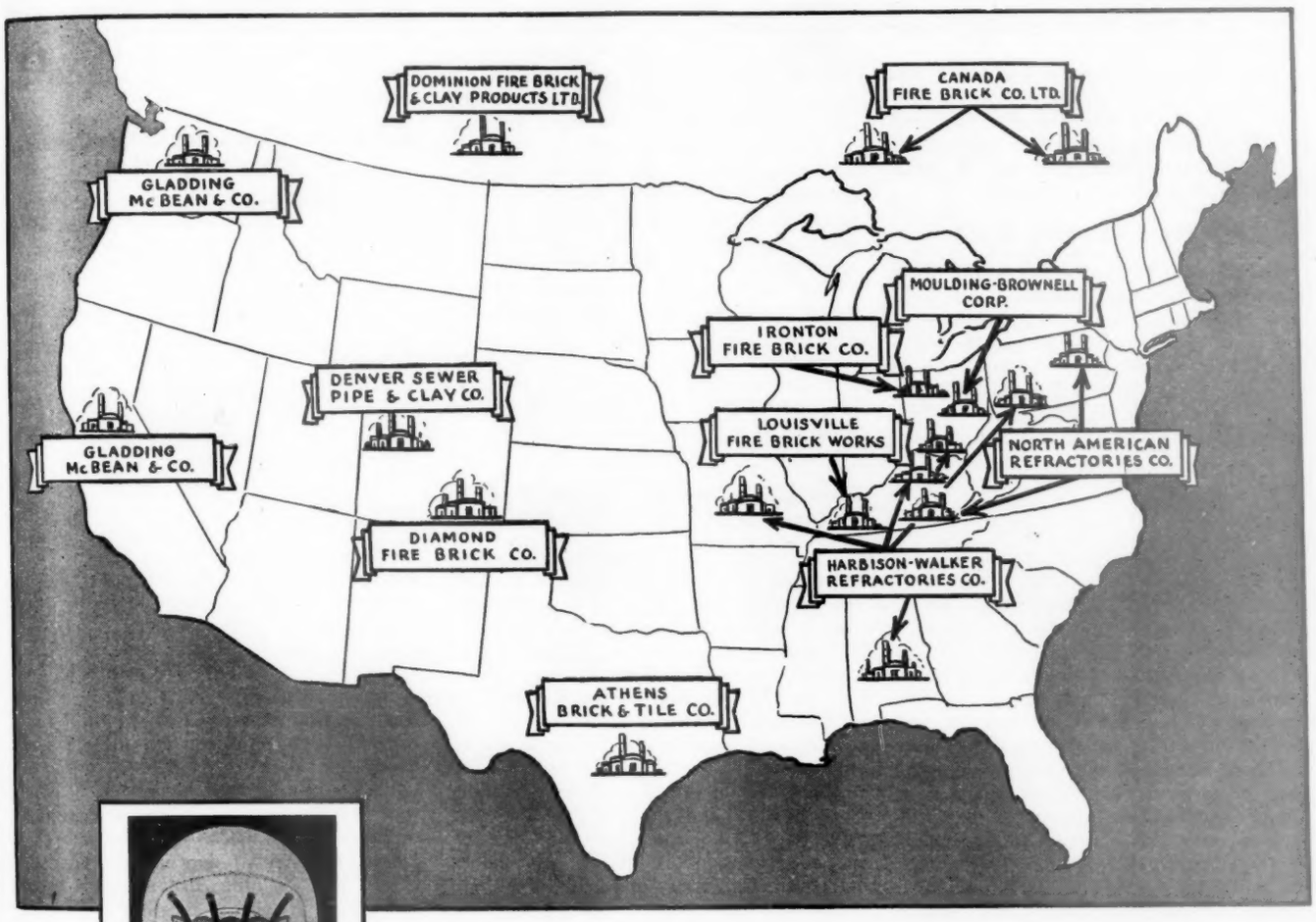
2 Factors are Vital *in* Locomotive Arch Brick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Association will hold its next meeting at the Severin Hotel, Indianapolis, on Monday, October 1, at 7 p. m. The meeting will be devoted to a discussion of Supplement No. 1 to the Rules of Interchange.

The Northwest Car Men's Association (St. Paul) will hold its next meeting at the Y.M.C.A., Minnesota Transfer, on Monday evening, October 1. M. C. Van Gundy, consulting chemist of the Texas Company, will speak on the manufacture and uses of petroleum products.

The Toronto (Ont.) Railway Club will hold its next meeting on Friday evening, October 5, at the Royal York Hotel, Toronto. J. L. Busfield will present a paper on the Diesel engine.

The Canadian Railway Club will hold its next meeting on Monday evening, October 8, at the Windsor Hotel, Montreal. W. H. Stevenson, locomotive foreman, C. P. R., Montreal, will speak on "A Night With the Locomotive Foreman."

Allegheny Shippers' Board

The ills confronting the railroad industry are those which are common to all business, said Charles E. Denney, president of the Erie, in an address before the Allegheny Regional Shippers' Advisory Board at Youngstown, Ohio, on September 13. Mr. Denney expressed the belief that the bus and truck problem will be solved in a manner fair to all concerned. Regulation of these forms of transportation adopted by the various states is in some cases not effective because of the difficulty of enforcement; effective regulation of weights and lengths of buses and trucks would go a long way toward providing the solution of the problem. In discussing increased rates, Mr. Denney said that the railroads were seeking needed revenues by slight increases on certain commodities as distinguished from a percentage increase, and that in calculating the proposed increases full and careful consideration had been given to all factors. To show the need for increased revenues, he stated that railroad expenses as a whole were reduced by 50 per cent in 1933, compared with 1929, and that today the railroads are faced with increases in their operating costs because of the restoration of wage cuts and increased costs of materials and supplies amounting to $293,000,000 annually.

An increase of 4.6 per cent in carloadings in the territory of the Allegheny board is expected in the fourth quarter of 1934, compared with the actual loadings during the same quarter of 1933, according to the forecast based on reports of commodity committees. Estimated total loadings were 665,712 cars, as compared with 636,213 in the fourth quarter of 1933.

Atterbury Finds Rate Increase Only Practicable Offset to Rising Costs

The only practicable way to meet the higher costs with which railroads are now confronted is by some reasonable increase in certain freight rates, General W. W. Atterbury, president of the Pennsylvania said in a letter which accompanied dividend checks mailed on September 15 to P.R.R. stockholders. The dividend, amounting to 50 cents per share, is the second paid this year and is equivalent to one per cent on the par value of the 13,167,696 shares of stock outstanding. A total of 233,129 stockholders participated in the distribution.

General Atterbury's letter reads in part as follows:

"It would have been a great pleasure to have increased the amount of this dividend had the net earnings justified that action. Gross earnings for the first six months showed an increase of 19 per cent compared with similar period in 1933; however, since July 1 there has been a declining, instead of an upward, trend in the volume of business. Moreover, the increase continues in all costs, such as wages, materials, and fuel, and it is increasingly difficult to improve the net income.

"Strict economy prevails in all branches of the service, and while the appearance of stations, equipment, and other facilities needs improvement, the Company's tracks, equipment and facilities are being maintained in sound condition to assure public safety and comfort. We are constantly improving the operations and equipment.

"All railroads have entered upon a period when they are paying higher prices for materials and supplies, higher wages to employes, heavier taxes and other outlays, so that the only practicable way that now seems available to meet this difficult situation is by some reasonable increase in certain freight rates."

Crew Law Complaint Against D. & H. Dismissed by N. Y. Commission

A complaint alleging that the operation of certain trains by the Delaware & Hudson between points on its Lake George branch is in violation of the full-crew law has been dismissed by the Public Service Commission of New York after a hearing held on the complaint of the Brotherhood of Railroad Trainmen.

It was alleged that the full-crew law is violated in the fact that the railroad has removed certain yard limit boards between Fort Edward and Glens Falls, and that three yards were consolidated to circumvent the provisions of the law, which does not require full crews in yards.

The railroad company claimed that the change was made primarily in the interest of safety in operation and the commission accepted this view; and holds that the changes in the yard limits made by the road were in line with good operating practices and that they were within the law. The complaint was, therefore, dismissed.

Prior to September, 1922, the company had yards at Fort Edward, Hudson Falls, and Glens Falls. Hudson Falls is 2.4 miles from Fort Edward and Glens Falls is three miles farther. By consolidating these three yards into one yard extending from Fort Edward to 1½ miles north of Glens Falls, the road became one yard about seven miles long. The question presented in the case before the commission hinged on the interpretation of "yard."

This manner of operation has been in effect almost 12 years and there was no proof that the situation presented a dangerous condition or was an inconvenience to the traveling public. The dispatching of trains on this branch since the change has been done by dispatchers at Albany. With the former arrangement, with three yards, there was considerable delay in getting the crews over the road because of the necessity of advising the dispatcher when trains arrived at Glen Falls, Hudson Falls and Fort Edward. Under the present arrangement all this is done away with and in addition the possibility of error in the issuing or transcribing of such train orders, which were referred to in the record of the proceeding is also done away with.

The report as published says nothing about speeds or time table rules. According to the "Official Guide," there are three passenger trains each way each week day (only two in business hours) and all are run at low speed with no meets at way stations.

C.P.R. Loan Guarantee Enters Canadian Political Speeches

Campaign speeches in the special election now being held in Ontario to fill vacancies in the Canadian Parliament caused by deaths or resignations indicate that the railway situation will be an important issue in the Canadian general election which is in the offing either before Christmas or early in the new year. The Ontario election is regarded as a "little general election" and the contest there has produced arguments which, it is believed, will be repeated in the expected general election.

One aspect of the railway situation which is producing considerable discussion is the $60,000,000 loan to the Canadian Pacific which was guaranteed by the present Canadian government. Hon. Robert Manion, minister of railways and canals, has been busy explaining why the government guarantee was extended on this loan. Sentiment in Ontario is regarded as favorable to government ownership and Dr. Manion has been denying that the loan to the C.P.R. had the slightest tinge of a move toward amalgamation of the C.N.R. with the C.P.R. under private ownership. Meanwhile another member of the present Conservative government—Hon. Alfred Duranleau, minister of marine,—defended the C.P.R. loan on other grounds in a recent address at a political meeting in Quebec, which is regarded as a private ownership province. Mr. Duranleau at the same time made derogatory references to the financial drain of the Canadian National upon the federal treasury.

If the Canadian National met its obligations as faithfully as did the Canadian Pacific, Canada would not have to dole out each week $1,000,000 to maintain operations of the national railroad, Mr. Duranleau said. He referred to the fact that the C.P.R. had paid back to Canadian banks $12,500,000 of the $60,000,000 loan guaranteed by the federal Government. He rebuked the Liberal party for its "false" claims that Ottawa had extended the country's money as a loan to the privately owned railroad company, adding:

"Even if it was true, no blame could be attached to such a transaction. It must not be forgotten, in fact, that in other countries, particularly in Great Britain and the United States, the C.P.R. is considered by all as a most faithful barometer of the economic situation in this country."

He flayed the pre-1930 King administra-

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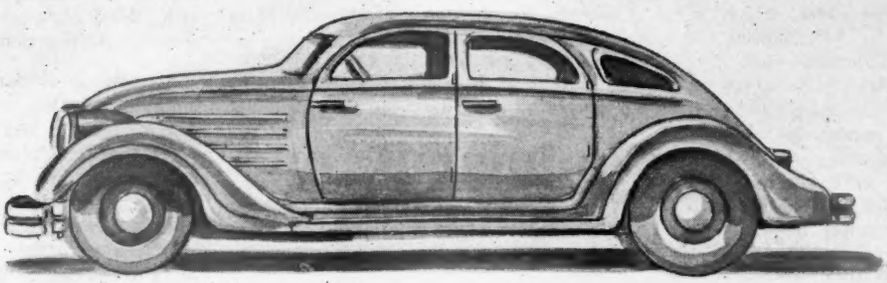
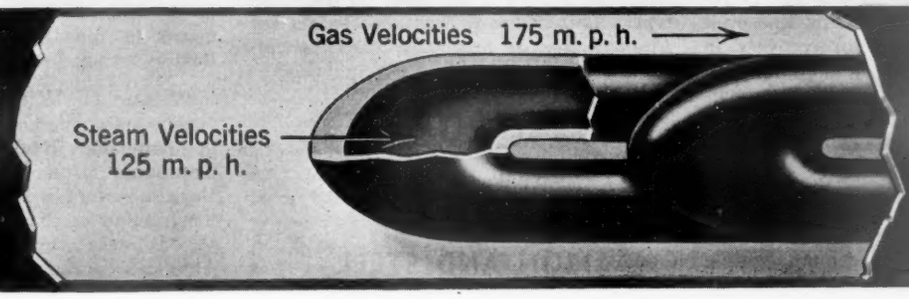
Streamlined
FOR ECONOMY

Automobiles are streamlined for speeds beginning at 35 m. p. h.



Superheater units are streamlined both externally and internally



IT is an axiom that streamlining is a source of efficiency to both automobiles and superheater units.

The penalty for nullifying the streamline effect, however, is much more severe in the case of superheater units; for the superheater units carry the rapid flow of steam to the cylinders. Any internal restriction would spoil the streamline effect and would seriously lessen the flow of power to the cylinders — in some instances restriction has been so severe as to cause the locomotive to fail for steam. External ridges on the superheater units act as obstructions to the flow of the hot gases to the stack and markedly reduce the steaming qualities of the locomotive.

If you want the maximum efficiency from your superheater, be sure that the designed streamline form of the units is maintained. When the superheater units become unserviceable after many years of service, have them remanufactured at our plant. This is a guarantee that the internal and external streamline effect will be maintained. No welds with attendant uncontrolled flow of metal are allowed. An Elesco superheater unit — new or remanufactured — is one piece from end to end, with full areas throughout and smooth internal and external surfaces.

• • •

Ask for a copy of our interesting booklet on the Elesco unit remanufacturing service. A copy will be sent at your request; no obligation.

THE SUPERHEATER COMPANY

Representative of AMERICAN THROTTLE COMPANY, Inc.

60 East 42nd Street
NEW YORK

ELESCO

Peoples Gas Building
CHICAGO

A-911

Canada: The Superheater Company, Limited, Montreal

Superheaters - Feed Water Heaters - Exhaust Steam Injectors - Superheated Steam Pyrometers American Throttles

tion as one of "extravagance and lack of foresight," stating: "This extravagance was to the fore in the exploitation of the Canadian National, an extravagance which strewed the country with hotels as sumptuous as they were useless. One hotel alone, at Vancouver, cost nearly $11,000,000, and is not yet completed or furnished; then there is the Hotel Scribe in Paris, and that other hotel in Jamaica in which was invested, only to lose it, several hundreds of thousands of dollars; these examples constitute eloquent evidence of a wastage which, after having gone on throughout this country, extended itself beyond the seas. Extravagance which in eight years increased by $450,000,000 the debt of the Canadian National, which is guaranteed by the country; $450,000,000 on which we have paid ever since costly interest; $450,000,000 to permit one railroad to ruin, if possible, another one which, prosperous until then, suffered from this disastrous competition—disastrous for both railways and for the country."

Durable Goods Industries Committee Organized on Permanent Basis

Last March, at the request of General Hugh S. Johnson, a Durable Goods Committee was organized. After weeks of research it presented to President Roosevelt its views upon the needs of recovery in the durable goods industries. The committee continued to function and at its suggestion more than 100 representatives of the durable goods industries met at Hot Springs, Va., September 14 and 15. It was decided to organize on a permanent basis and to elect a new Durable Goods Industries Committee to serve until their successors are elected, but not longer than one year. A Council will also be set up, including one member from each of the durable goods industries, each industry to make its own selection. This council will constitute the regular medium of contact between the committee and the industries included within the group.

The following were unanimously elected members of the new Durable Goods Industries Committee: George H. Houston, The Baldwin Locomotive Works; James W. Hook, The Geometric Tool Company; C. R. Messinger, Oliver Farm Equipment; S. F. Voorhees, of Voorhees, Gmelin & Walker; Robert W. Irwin, Robert W. Irwin Company; George P. Torrence, Link Belt Company; F. R. Hoadley, Farrell-Birmingham Company; C. C. Sheppard, Louisiana Central Lumber Company; H. Gerrish Smith, National Council of American Shipbuilders; Harry S. Kimball, Fabricated Metal Products Industry; Walker J. Kohler, The Kohler Company; F. A. Lorenz, Jr., American Steel Foundries; J. S. Tritle, Westinghouse Electric & Manufacturing Company; Charles R. Hook, American Rolling Mill Company, and Robert R. Fauntleroy, Moline Malleable Iron Company.

This committee met and organized with George H. Houston, chairman; James W. Hook, vice-chairman, and Harry S. Kimball, treasurer. The executive committee will consist of the chairman and vice-chairman, and the chairmen of such standing committees as may later be appointed.

Re-employment in the durable goods industries is still the keystone of recovery. The Durable Goods Industries Committee will continue to analyze the conditions interfering with such re-employment, including governmental regulation of industry and the supply of capital to private business upon which these industries must rely for support, also proposed plans for industrial reform and social changes of such a character as to discourage new enterprise. This committee will continue also to report to all durable goods industries and to publicize its findings on these matters and to crystallize the viewpoint of industry with respect to recovery.

Contrary to newspaper reports, no platform of industry was adopted.

Equipment and Supplies

LOCOMOTIVES

THE CHILEAN STATE RAILWAYS are now inquiring for 10 locomotives of the 4-8-4 type. This company was reported in the *Railway Age* of September 8 as contemplating the purchase of this equipment.

FREIGHT CARS

THE NATIONAL RAILWAYS OF MEXICO contemplates buying 1,000 box cars of 40 tons capacity.

IRON AND STEEL

Correction

The item reported in the *Railway Age* of September 15, to the effect that the Wabash is inquiring for 1,000 tons of structural steel for a bridge at St. Louis, Mo., is in error in that Missouri, which is building the highway bridge over the Wabash tracks, is handling the inquiry.

SIGNALING

CALIFORNIA.—The Union Switch & Signal Company is furnishing material for interlocking on the new railroad and highway bridge being built by the Department of Public Works, state of California, over the Sacramento river at M Street, Sacramento. The order includes five electric switch movements, color-light signals and electric interlocking, 11 levers. There will be a track model which will indicate the position of trains moving over the bridge. Crossing gates will be provided for highway traffic, to be operated from the bridge operator's room.

MISCELLANEOUS

BOSTON & MAINE.—The Valve Pilot Corporation, New York, has received an order from the Lima Locomotive Works, Inc., for five locomotive valve pilots for application to the five Pacific type locomotives which that company is building for the Boston & Maine.

Supply Trade

C. V. Kent, secretary and treasurer of the **Badeker Manufacturing Company,** Chicago, has been elected president, to succeed **Alfred N. Willsie,** deceased.

The Mine & Smelter Equipment Company, Phoenix, Ariz., has been appointed "Loadmaster" distributors for the state of Arizona by the **Bucyrus-Erie Company,** South Milwaukee, Wis., **The Northern Commercial Company,** Seattle, Wash., has been appointed distributor for the Alaska and Yukon territory.

H. S. McPherson, in charge of mechanical sales in the Boston (Mass.), district for the Mechanical Goods division of **United States Rubber Products, Inc.,** New York, has been appointed manager of mechanical sales in the St. Louis (Mo.), district. Mr. McPherson has been with this company for over 15 years and prior to his Boston service held positions in the export department in Australia, South America, and the Far East. **W. G. Mueller,** salesman with the company for more than 25 years chiefly in the Connecticut territory, has been promoted to manager of mechanical sales, Boston branch.

Wilbur H. Winters has been elected vice-president in charge of operations of the **American Brake Shoe & Foundry Company,** with headquarters at New York. After five years on fortification construction work on the Panama Canal, Mr. Winters entered the employ of the American Brake Shoe & Foundry Company in 1916. In 1921 he was appointed assistant comptroller and in 1924 transferred to the operating department as general superintendent of foundries. Mr. Winters has been active in the preparation of the Gray Iron Foundry Code, being a member of the Gray Iron Code Authority and a director of the Gray Iron Foundry Society.

Alexander C. Brown has resigned as president and treasurer of the **Industrial Brownhoist Corporation,** Bay City, Mich., to become first vice-president of the **Cleveland Cliffs Iron Company,** Cleveland, Ohio, effective September 20. Mr. Brown, who will continue as a director of Industrial Brownhoist, will be succeeded as president and treasurer by **Melvin Pattison** who has been executive vice-president and secretary. Other promotions resulting from Mr. Brown's resignation are as follows: **Edward S. Clark,** a director since 1927, has been elected secretary; **Hoyt E. Hayes,** formerly export sales manager and manager Cleveland district sales, has been elected vice-president and sales manager and will shortly move to the general offices at Bay City; **George A. Long,** plant manager and assistant secretary, has been elected vice-president, in charge of manufacturing, and retains the office of assistant secretary; **James B. Hayden,** sales engineer, has been appointed assistant sales manager; **Ernest Taylor,** vice-president in charge of engineering and purchasing, and **Arnold J. Copeland,**

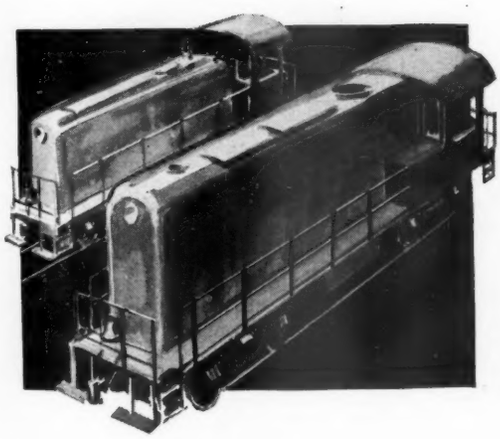
Continued on next left-hand page

RAILROAD DIESELS FOR RAILROAD MEN

The operating cost of Alco Diesel Locomotives based on three years' operating experience is as follows:

COST PER HOUR

ITEM	300 H.P.	600 H.P.
Repairs and running maintenance	$ .2950	$ .4920
Fuel at 4c per gal.	.1400	.2800
Lub. oil at 50c per gal.	.032	.0400
Other supplies	.029	.0136
Wages of Crew	.8220	.8300
Total	$1.3180	$1.6556
Total Hours per year	7500	8000



In computing cost of lubricating oil no credit was given for the oil removed from crank case every 90 days of 2000 hours of service.

This advertisement (No. 12 of a series) presents another of the many factors which, all combined, make the ALCO Diesel an outstanding purchase.

AMERICAN LOCOMOTIVE COMPANY

ALCO DIESEL

30 CHURCH STREET · NEW YORK · N.Y.

assistant treasurer, continue in their present offices.

OBITUARY

Peter Ballet, vice-president and treasurer of the St. Louis Rail Equipment Company, East St. Louis, Ill., died at Alva, Okla., on September 4.

Alfred N. Willsie, president of the Badeker Manufacturing Company, Chicago, died in that city on August 16. He was born at Galesburg, Ill., in 1874 and began his railroad career as a messenger boy for the Chicago, Burlington & Quincy. After serving as chief clerk to the master mechanic, fireman, engineman and road foreman of motive power for this railroad, he was appointed division superintendent in 1905, with headquarters at Brookfield, Mo. Later he served in the same capacity at St. Joseph, Mo., Hannibal, and Omaha, Neb. In 1918, he entered the employ of the Locomotive Stoker Company as district engineer and later became western manager. In 1928, he became affiliated with the Badeker Manufacturing Company.

Construction

CITY OF ST. LOUIS.—The Board of Public Service of St. Louis, Mo., will receive bids until noon on October 16 for the construction of a reinforced concrete viaduct to carry Hampton avenue over the Missouri Pacific and the St. Louis-San Francisco, the River Des Peres and Manchester avenue. The viaduct will cost about $360,000.

NEW YORK CENTRAL.—The New York Public Service Commission has denied the petition of this road for a rehearing on an order directing the elimination of the New Main street and West Side avenue crossings of the West Shore division in Haverstraw, Rockland county, N. Y.

PACIFIC GREAT EASTERN—The Dominion Bridge Company, Ltd., Vancouver, B. C., has been awarded a contract for the construction of a steel bridge over Cheakamus canyon at a cost of about $45,000. A contract for the construction of two timber bridges, involving a total expenditure of about $50,000, has been let to W. C. Arnett & Co., Ltd., Vancouver.

READING.—This company has been granted permission by the Public Service Commission of Pennsylvania to modify its original plans for building a bridge over the single track line of its Lebanon and Tremont branch, at a point about 1,000 ft. north of Westmont station in North Lebanon Township, Lebanon county, Pa., to replace the wooden structure destroyed by fire. The railroad proposes to construct a single span bridge with steel deck trusses and new concrete masonry abutments. The bridge is to have a length of about 110 ft. and will cost $22,700.

Financial

KANSAS CITY, MERRIAM & SHAWNEE. —*Abandonment.*—The receiver of this road has been authorized by the Interstate Commerce Commission to abandon its entire line extending from Rose Hill, Kans., to Kansas City, together with an extension connecting at Merriam, Kans., with a line of the St. Louis-San Francisco, a total of 7.11 miles. Chairman Lee, concurring in part, said that, while it is clear that public convenience and necessity no longer require operation of the line and thus he approved the issuance of the certificate for abandonment, he was nevertheless unable to agree with the conclusion of the majority that "operation of this entirely independent intrastate line in interstate and foreign commerce would unduly burden that commerce."

NEW YORK, NEW HAVEN & HARTFORD.—*R.F.C. Loan.*—This company has applied to the Reconstruction Finance Corporation for an additional loan of $4,000,000 to meet in part requirements amounting to $8,265,000 which come due in the period from October 2 to January 1, including taxes, interest, equipment trust obligations, sinking fund instalments, leased line rentals, and additions and betterments.

ST. LOUIS-SAN FRANCISCO.—*Abandonment.*—The Interstate Commerce Commission has authorized this company to abandon a line extending from Brownington, Mo., to Lowry City Junction, 6.2 miles.

ST. LOUIS-SAN FRANCISCO.—*Receivership.*—John T. Harding of Kansas City, Mo., has been appointed by the United States district court at St. Louis, Mo., to serve as master for the hearing to determine the solvency of the Frisco. The appointment follows a request of the Interstate Commerce Commission, that the court to determine whether the railroad is solvent or insolvent. The master has been authorized to take testimony, both oral and documentary, and later to file his findings and recommendations with the court.

WASHINGTON & OLD DOMINION.—*Abandonment.*—The Interstate Commerce Commission has authorized the receivers of this road to abandon that portion of its line extending from Thrifton, Va., to Great Falls, 12.1 miles.

Average Prices of Stocks and of Bonds

	Sept. 18	Last week	Last year
Average price of 20 representative railway stocks..	33.14	33.95	46.41
Average price of 20 representative railway bonds..	70.90	71.73	69.20

Dividends Declared

Joliet & Chicago.—$1.75, Payable October 1 to holders of record September 20.

Mahoning Coal R. R.—Common, $6.25, quarterly, payable November 1 to holders of record October 15.

Providence & Worcester.—$2.50, quarterly, payable October 1 to holders of record September 12.

St. Joseph, South Bend & Southern.—87½c, semi-annually; Preferred, $2.50, semi-annually, both payable September 15 to holders of record September 10.

Southern.—Mobile & Ohio.—$2.00, semi-annually, payable October 1 to holders of record September 15.

Railway Officers

EXECUTIVE

E. B. Barber, vice-president of the Algoma Central & Hudson Bay, with headquarters at Sault Ste. Marie, Ont., has been appointed president, succeeding **R. Home Smith,** who has resigned.

J. O. Couch, industrial engineer of the Louisiana & Arkansas, has been appointed assistant to president of that road and the Louisiana, Arkansas & Texas, with headquarters at New York.

J. R. Downes, chief of freight transportation for the Pennsylvania, has been promoted to assistant vice-president, with headquarters at Philadelphia, Pa. He was born on October 23, 1883, at Tyrone, Pa., and was educated at Tyrone High School. He entered the service of the Pennsylvania in May, 1901, as a clerk in the superintendent's office at Pittsburgh, Pa., being transferred later to the general manager's' office at Philadelphia in the same capacity. In

J. R. Downes

January, 1914, Mr. Downes was promoted to acting chief clerk to the general manager, serving in that capacity until July, 1914, when he left the service of the Pennsylvania. He re-entered the employ of the P.R.R. in June, 1918, and was appointed chief clerk to the regional director, Allegheny region, serving in that position during the United States Railroad Administration. He became chief clerk to the vice-president of the Central region in March, 1920, and three years later he was promoted to superintendent of freight transportation, in which position he served until July, 1928, when he was appointed chief of freight transportation.

OPERATING

W. N. Garvin, superintendent of the St. Louis Terminal division of the Wabash, at St. Louis, Mo., has been promoted to superintendent of transportation, with the same headquarters, to succeed **Fred Meyers,** deceased. **M. M. Eidson,** car accountant, with headquarters at St. Louis, has been appointed to the newly-created

Continued on next left-hand page

At the Sound of the Whistle--

10 GOOD REASONS—

—Why "Union" Coded Continuous Cab Signals are effective in improving railway service:

1. **Increase safety of train operation.**
2. **Expedite traffic.**
3. **Signal indications are continuously visible irrespective of fog, other weather conditions, curves or physical obstructions.**
4. **Indicate *instantly* any changed condition on track ahead.**
5. **Permit trains to increase speed *at any point* where a less restrictive indication is received.**
6. **Determine location of broken rails.**
7. Supplemented by audible indication.
8. **Cab Signal duplicated on fireman's side.**
9. **Prevent misreading of wayside signals.**
10. **Effect operating economies.**

—the engineman, in a cab equipped with the "Union" Coded Continuous Cab Signal, knows that the signal has changed to a more restrictive indication and that the whistle will continue to blow until he acknowledges it by operating the acknowledging lever.

This supplemental audible indication provides additional operating safety and is but one of the many outstanding features of the "Union" Coded Continuous Cab Signal System. Ask us about the others.

1881 **Union Switch & Signal Co.** 1934

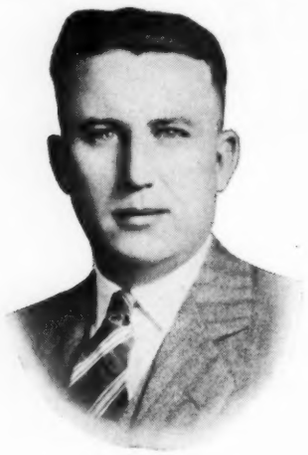
SWISSVALE, PA.

NEW YORK MONTREAL CHICAGO ST. LOUIS SAN FRANCISCO

position of assistant superintendent of transportation, with the same headquarters, and has been succeeded as car accountant by **M. W. Pegan. C. A. Johnston,** division engineer, with headquarters at Montpelier, Ohio, has been promoted to superintendent of the St. Louis Terminal division, to succeed Mr. Garvin.

J. W. Devins, assistant to the general manager of the Minneapolis & St. Louis, has been appointed acting general manager, with headquarters as before at Minneapolis, Minn. Mr. Devins succeeds to the duties of **James P. Houston,** general manager, who died recently.

J. M. Symes, superintendent of passenger transportation of the Eastern region of the Pennsylvania, with headquarters at Philadelphia, has been appointed chief of freight transportation. He was born at Glen Osborn, Pa., near Pittsburgh, and began work with the P.R.R. in May, 1916, in the office of the auditor of through freight traffic at Pittsburgh, transferring to the trainmaster's office of the Pittsburgh division in the same year. In May, 1920, he was assigned to the general superintendent's office at Cleveland, Ohio,



J. M. Symes

and returned to Pittsburgh three years later as freight movement director in the office of the superintendent of freight transportation. Mr. Symes became chief clerk to the general manager at Chicago in May, 1927, and was promoted to superintendent of passenger transportation in the same city a year later. In December, 1929, he was appointed superintendent of passenger transportation at Philadelphia.

TRAFFIC

P. C. Reed, supervisor of perishable freight service for the Pennsylvania, has been promoted to perishable traffic manager, with headquarters at New York, succeeding the late **J. W. Roberts.**

E. B. Hickman has been appointed assistant general freight and passenger agent for the Louisiana & Arkansas and the Louisiana, Arkansas & Texas, with headquarters at Shreveport, La. **E. O. Sikes** has been appointed general agent of these roads also at Shreveport.

J. E. Davis, assistant to the freight traffic manager of the Union Pacific System, has been appointed assistant to the vice-president in charge of traffic, with headquarters as before at Omaha, Neb. **Carl Beach,** who has been connected with the traffic department at Portland, Ore., has been promoted to assistant to the

J. E. Davis

freight traffic manager, with headquarters at Omaha, to succeed Mr. Davis.

Mr. Davis was born on January 27, 1884, at Franklin, Ind., and entered railway service in 1902 with the Cleveland, Cincinnati, Chicago & St. Louis at Franklin. In 1906 he left this company to go with the Southern Pacific at Portland, Ore. From 1908 to 1913 Mr. Davis was connected with the joint general offices of the Union Pacific and the Southern Pacific at Portland, and following the severance of all connection between these lines in the latter year, he remained with the Union Pacific with the same headquarters. In 1922 he was appointed assistant general freight agent at Portland and in April, 1929, he was promoted to assistant to the freight traffic manager at Omaha, which position he was holding at the time of his recent appointment.

OBITUARY

Gentry Waldo, assistant freight traffic manager of the Union Pacific, with headquarters at Omaha, Neb., died on August 17 as the result of an automobile accident.

J. Wm. Robbins, assistant secretary and assistant treasurer of the Lehigh Valley and its affiliated companies, died suddenly on September 6 of a heart attack. Mr. Robbins was 67 years old.

G. F. Meighan, executive vice-president of the St. Louis & Hannibal, and general traffic manager of Ringling Brothers Circus, with headquarters at Chicago, died in Evanston, Ill., on September 17, following a cerebral hemorrhage.

J. K. Ridgely, general passenger agent of the Louisville & Nashville, with headquarters at New Orleans, La., died suddenly on September 10. Mr. Ridgely was born on December 3, 1872, at Ridgely, Md., and was educated at the University of Virginia. He entered railway service in 1889 as a clerk with the Louisville, Nashville & St. Louis (now part of the Southern), and then served consecutively as a rate clerk on the South Florida (now part of the Atlantic Coast Line) and as a traveling passenger agent on the Florida Central & Peninsular (now part of the Seaboard Air Line). Subsequently, Mr. Ridgely went with the L. & N. as a traveling passenger agent, then being appointed district passenger agent at Memphis, Tenn. In 1895 he was appointed northwestern passenger agent at Chicago and in 1901 he was made division passenger agent at New Orleans. Mr. Ridgely was promoted to assistant general passenger agent with the same headquarters in 1911 and six years later he was further advanced to general passenger agent.

A. E. Staub, assistant to vice-president and general manager of the Delaware, Lackawanna & Western, with headquarters at New York, died suddenly in Montclair, N. J., on September 19. He was 65 years old. Mr. Staub was born at Halle, Germany, on December 13, 1868, and was educated in the public schools and the Latin high school of Halle. He came to America in July, 1886. He entered the employ of the Lackawanna at Buffalo in April, 1892, as freight and waybill clerk and was promoted to assistant cashier and accountant in April, 1896. He became timekeeper and division accountant in August, 1899, and in November, 1907, he was transferred to the staff of the general superintendent as statistician. From September, 1913, until the following July, Mr. Staub was employed as statistician by the Union Pacific. Returning to the Lackawanna, he was placed in charge of the weighing and inspection bureau, and in February, 1917, he was promoted to superintendent of car service. He was superintendent of the Buffalo division from May, 1918, until July, 1926, when he became assistant to vice-president and general manager.

A. L. Langdon, who was traffic manager and general freight agent of the Long Island until his retirement in September, 1916, died at New York on September 14. Mr. Langdon was born in 1846 at Sugar Grove, Pa., and was graduated from Randolph Academy in 1863. He entered the service of the Pennsylvania in November, 1863, as a clerk in the freight station of the Atlantic & Great Western at Corry, Pa., and was advanced to agent of that road in September, 1867. In April, 1869, he was appointed agent of the Empire Line. He was made soliciting agent of the Empire Line at Hagerstown, Md., in April, 1874, and was appointed soliciting agent of the Pennsylvania's fast local freight line in September of the same year. He was advanced to general freight agent of the Cumberland Valley at Chambersburg, Pa., in August, 1875, and in July, 1891, he was moved to Harrisburg in the same capacity. In April, 1892, Mr. Langdon was made general freight agent of the Cumberland Valley, and interior agent of the Great Southern Dispatch at Harrisburg, Pa. In May, 1893, he was made general freight agent and general eastern agent of the Great Southern Dispatch. In June, 1903, Mr. Langdon was transferred to the Long Island as general freight agent, with headquarters in New York, and in 1905, he became traffic manager.